# State of Delaware Department of Natural Resources and Environmental Control Division of Air and Waste Management Air Quality Management Section

156 South State Street Dover, DE 19901

## 7 DE Admin. Code 1130 (Title V) Operating Permit Facility I.D. Number: 1000300016 Permit: AQM-003/00016 - Part 3 (Renewal 1)(Revision 2)

Effective Date: March 4, 2010 Expiration Date: May 26, 2013

Renewal Application Due Date: May 25, 2012

Pursuant to 7 **Del. C.**, Ch 60, Section 6003, 7 **DE Admin. Code** 1102 Section 2.0, and 7 **DE Admin. Code** 1130 Section 7.2, approval by the Department of Natural Resources and Environmental Control ("Department") is hereby granted to operate the emission units listed in Condition 1 of this permit subject to the terms and conditions of this permit.

This approval is granted to:

Permittee/Owner (hereafter referred to as "Company/Owner")	<b>Operator</b> (hereafter referred to as "Operator")
The Premcor Refining Group Inc. 4550 Wrangle Hill Road Delaware City, Delaware 19706 Responsible Official: Kirk Saffell Title: Vice President Health, Safety and Environmental	Valero Delaware City Refinery
Plant Site Location (hereafter referred to as "Facility")	Plant Mailing Address
Valero Delaware City Refinery 4550 Wrangle Hill Road Delaware City, Delaware 19706	Valero Delaware City Refinery 4550 Wrangle Hill Road Delaware City, Delaware 19706

The nature of business of the Facility is Petroleum Refining. The Standard Industrial Classification code is 2911. The North American Industry Classification System code is 324110.

Ravi Rangan, P.E. / Date Engineer Engineering & Compliance Branch (302) 323-4542

Paul E. Foster, P.E. / Date Program Manager Engineering & Compliance Branch (302) 323-4542

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## **Condition 1- Emission Unit Identification**

[Reference: 7 **DE Admin. Code** 1130 Section 3.3 dated 11/15/93]

#### a. Emission Units Information.

Emissio	n Units	Emission Unit Description	
	80-1	Boiler #1 (618 mmBTU/hr input, natural gas and desulfurized refinery fuel gas fired)	
DCPP	80-2	Boiler #2 (716 mmBTU/hr input, natural gas and desulfurized refinery fuel gas fired)	
	80-3	Boiler #3 (618 mmBTU/hr input, syngas, natural gas, and desulfurized refinery fuel gas fired)	
	80-4	Boiler #4 (737 mmBTU/hr input, desulfurized refinery fuel gas fired)	
	82	Texaco Gasifier 1 (235 ton/hr synthesis gas from both Gasifiers 1 and 2)	
	82	Quench (gas cooler) for Gasifier 1	
	82	Texaco Gasifier 2 (235 ton/hr synthesis gas from both Gasifiers 1 and 2)	
Gas Plant	82	Quench (gas cooler) for Gasifier 2	
	82	Amine Acid Gas Removal system	
	82	Syngas Flare	
	50	Three-Cell Linear Mechanical Draft Evaporative Cooler (gas flow of 3,000,000 ACFM, cooling water flow of 30,000 gallons per minute)	
	84	CCU1 & CCU2 - Each, one Gas Turbine (LHV input of 824.7 mmBTU/hr, HHV input of 878.4 mmBTU/hr, syngas or low sulfur diesel fuel fired)	
CCU	84	Duct Burner (215 mmBTU/hr, HHV of 215 mmBTU/hr, natural gas fired, one each, CCU1 & CCU2)	
	84	Heat Recovery Steam Generator (one each, CCU1 & CCU2)	
	84	Electric Generator (90 MW nominal, one each, CCU1 & CCU2)	

#### b. 7 DE Admin. Code 1102 Permit Identification.

This table identifies the underlying permits whose provisions have been incorporated into this Title V permit and specifies the Reference: number that will be used to identify the source of the underlying permit condition throughout this Title V permit.

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Reference Number	Full Regulation No. 1102 Permit Designation
	APC-90/0288-OPERATION (Amendment 5) - Boiler 1 issued July 19,
APC-90/0288(A5)	2006. Emission Unit 80-1.
APC-90/0289(A6)	APC-90/0289-OPERATION (Amendment 6) - Boiler 2 issued July 19,
APC-90/0290(A5)	2006. Emission Unit 80-2.
	APC-90/0290-OPERATION (Amendment 5) - Boiler 3 issued July 19,
	2006. Emission Unit 80-3.
	APC-90/0288-OPERATION (Amendment 6) issued December 16,
	2008. Boiler 1, Emission Unit 80-1.
APC-90/0288(A6)	APC-90/0289-OPERATION (Amendment 7) issued December 16,
APC-90/0289(A7)	2008. Boiler 2, Emission Unit 80-2.
APC-90/0290(A6)	APC-90/0290-OPERATION (Amendment 6) issued December 16,
APC-90/0291(A1)	2008. Boiler 3, Emission Unit 80-3.
APC-97/0503(A5)	APC-90/0291-OPERATION (Amendment 1) issued December 16,
AI C 37 ( CSCS (AS )	2008. Boiler 4, Emission Unit 80-4.
	APC-97/0503-OPERATION (Amendment 5)(LAER)(NSPS) issued
	December 16, 2008. Two combined cycle units, two duct burners, two heat
	recovery steam generators, two electric generators, Emission Unit 84.
APC-90/0291	<b>APC-90/0291-OPERATION - Boiler #4</b> issued February 2, 1993. Boiler
APC-90/0291	No. 4, Emission Unit 80-4.
	<b>APC-97/0504-OPERATION</b> issued August 6, 2003. Gasifiers #1 & #2,
APC-97/0504	two gas coolers, amine acid gas removal system, syngas flare - Unit 82,
	One 3-cell linear mechanical draft evaporative cooler – Emission Unit 50.
	APC-97/0503-OPERATION (Amendment 3) (LAER)(NSPS) issued
APC-97/0503(A3)	July 19, 2006. Two combined cycle units, two duct burners, two heat
	recovery steam generators, two electric generators – Emission Unit 84.
AQM-003/00016-	AOM-002/00016-CATP issued May 27, 2009, DCDD4 (Poiler No. 4)
CAIR	<b>AQM-003/00016-CAIR</b> issued May 27, 2008. DCPP4 (Boiler No. 4)

#### **Condition 2 - General Requirements**

#### a. Certification.

- Each document submitted to the Department/EPA as required by this permit shall be certified by a Responsible Official as to truth, accuracy, and completeness. Such certification shall be signed by a Responsible Official and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [Reference: 7 DE Admin. Code 1130 Section 5.6 dated 11/15/93 and 6.3.1 dated 12/11/00]
- 2. Any report of deviations required under Conditions 3(c)(2)(ii) or 3(c)(2)(iii) that must be submitted to the Department within ten calendar days of discovery of the deviation, may be submitted in the first instance without a certification provided a certification meeting the requirements of Condition 2(a)(1) is submitted to the Department within ten calendar days thereafter, together with any corrected or supplemental information required concerning the deviation. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.3.4 dated 12/11/00]

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#### **Condition 2- General Requirements (Cont.)**

3. Each document submitted to the Department/EPA pursuant to this permit shall be sent to the following addresses:

State of Delaware – DNREC Division of Air and Waste Management Air Quality Management Section 156 South State Street Dover, DE 19901	United States Environmental Protection Agency Associate Director of Enforcement (3AP12) 1650 Arch Street Philadelphia, PA 19103
ATTN: Program Administrator	
No. of Originals: <b>1</b> & No. of Copies: <b>1</b>	No. of Copies: 1

#### b. Compliance.

- 1. The Owner and/or Operator shall comply with all terms and conditions of this permit. Any noncompliance with this permit constitutes a violation of the applicable requirements under the Clean Air Act, and/or 7 **DE Admin. Code** 1100, and is grounds for an enforcement action; for permit termination, revocation, and reissuance or modification; or for denial of a permit renewal. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.1 dated 12/11/00]
- 2.
- i. For applicable requirements with which the source is in compliance, the Owner and/or Operator shall continue to comply with such requirements. [Reference: 7 DE Admin. Code 1130 Sections 5.4.8.3.1 dated 11/15/93 and 6.3.3 dated 12/11/00]
- ii. For applicable requirements that will become effective during the term of this permit, the Owner and/or Operator shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [Reference: 7 DE Admin. Code 1130 Sections 5.4.8.3.2 dated 11/15/93 and 6.3.3 dated 12/11/00]
- 3. Nothing in Condition 2(b)(1) of this permit shall be construed to preclude the Owner and/or Operator from making changes consistent with Condition 2(m)(3) [Minor Permit Modifications] or Condition 4(a) [Operational Flexibility]. [Reference: 7 DE Admin. Code 1130 Sections 6.8 dated 12/11/00 and 7.5.1.5 dated 12/11/00]
- 4. The fact that it would have been necessary to halt or reduce an activity in order to maintain compliance with the terms and conditions of this permit shall not constitute a defense for the Owner and/or Operator in any enforcement action. Nothing in this permit shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious that the impacts of continuing operations. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.2 dated 12/11/00]
- 5. The Owner and/or Operator may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency or malfunction if both the record keeping requirements in Condition 3(b)(2)(iii) and the reporting requirements in Condition 3(c)(2)(ii)(A) are satisfied. /Reference: 7 DE Admin. Code 1130 Section 6.7.2 dated 12/11/00]

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#### **Condition 2- General Requirements (Cont.)**

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- i. In any enforcement proceeding, the Owner and/or Operator seeking to establish the occurrence of an emergency or malfunction has the burden of proof. [Reference: 7 DE Admin. Code 1130 Section 6.7.4 dated 12/11/00]
- ii. The provisions of 7 **DE Admin. Code** 1130 pertaining to Emergency/Malfunctions as defined in Conditions Nos. 2(b)(5); 2(b)(6); 3(b)(2)(iii); and 3(c)(2)(ii)(A) of this permit are in addition to any emergency or malfunction provision contained in any applicable requirement. [Reference: 7 **DE Admin. Code** 1130 Section 6.7.5 dated 12/11/00]
- Reserved.
- 8. If required, the schedule of compliance in Condition 5 of this permit is supplemental to and shall not sanction noncompliance with the applicable requirements upon which it is based. [Reference: 7 **DE Admin. Code** 1130 Section 5.4.8.3.3 dated 11/15/93]
- 9. Nothing in this permit shall be interpreted to preclude the use of any credible evidence to demonstrate noncompliance with any term of this permit. [Reference: 62 FR 8314 dated 2/24/97]
- 10. All terms and conditions of this permit are enforceable by the Department and by the U.S. Environmental Protection Agency ("EPA") unless specifically designated as "State Enforceable Only" [Reference: 7 DE Admin. Code 1130 Section 6.2.1 dated 12/11/00]
- c. <u>Confidentiality</u>. The Owner and/or Operator may make a claim of confidentiality for any information or records submitted to the Department. However, by submitting a permit application, the Owner and/or Operator waives any right to confidentiality as to the contents of its permit, and the permit contents will not be entitled to protection under 7 **Del. C.**, Ch 60, § 6014. [Reference: 7 **DE** Admin. Code 1130 Sections 5.1.4 dated 11/15/93, 6.1.3.3.5 dated 12/11/00, and 6.1.7.5 dated 12/11/00]
  - Confidential information shall meet the requirements of 7 Del. C., Ch 60, § 6014, and 29 Del. C., Ch 100. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
  - 2. If the Owner and/or Operator submits information to the Department under a claim of confidentiality, the Owner and/or Operator shall also submit a copy of such information directly to the EPA, if the Department requests that the Owner and/or Operator do so. [Reference: 7 DE Admin. Code 1130 Section 5.1.4 dated 11/15/93]
- d. Construction, Installation, or Alteration. The Owner and/or Operator shall not initiate construction, installation, or alteration of any equipment or facility or air contaminant control device which will emit or prevent the emission of an air contaminant prior to submitting an application to the Department under 7 DE Admin. Code 1102, and, when applicable, 7 DE Admin. Code No. 1125, and receiving approval of such application from the Department; except as exempted in 7 DE Admin. Code 1102 Section 2.2. [Reference: 7 DE Admin. Code 1102 Section 2.1 dated 6/1/97 and 7 DE Admin. Code 1130 Section 7.2.3 dated 12/11/00]
- **e.** <u>Definitions/Abbreviations</u>. Except as specifically provided for below, for the purposes of this permit, terms used herein shall have the same meaning accorded to them under the applicable requirements of the Clean Air Act and 7 **DE Admin. Code** 1100.
  - 1. "Act" means the Clean Air Act, as amended by the Clean Air Act Amendments of November 15, 1990, 42 U.S.C. 7401 et seq. [Reference: 7 DE Admin. Code 1130 Section 2 dated 11/15/93]
  - 2. "AP-42" means the Compilation Of Air Pollutant Emission Factors, Fifth Edition, AP-42, dated January 15, 1995, as amended with Supplements "A" dated February 1996, "B" dated November

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#### **Condition 2- General Requirements (Cont.)**

1996, "C" dated November 1997, "D" dated August 1998, "E" dated September 1999, and "F" dated September 2000 and the December 2001 update, the December 2002 update and the December 2003 update.

- 3. "CFR" means Code of Federal Regulations.
- 4. "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the sources, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Reference: 7 DE Admin. Code 1130 Section 6.7.1 dated 12/11/00]
- 5. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or of a process to operate in a normal or usual manner, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the malfunction. A malfunction shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. [Reference: 7 DE Admin. Code 1130 Section 6.7.1 dated 12/11/00]
- 6. "Number 2 fuel oil" and "No. 2 fuel oil" means distillate oil.
- 7. "Reg." and "Regulation" mean the regulations covered under 7 **DE Admin. Code** 1100.
- 8. "Regulations Governing the Control of Air Pollution" means the codification of those regulations enacted by the Delaware Department of Natural Resources and Environmental Control, in accordance with 7 **Del. C.,** Ch 60, § 6010.
- 9. Permit Specific Definitions None.

#### f. Duty to Supplement.

- Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the Owner and/or Operator shall promptly submit to the Department such supplementary facts or corrected information. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
- 2. The Owner and/or Operator shall promptly submit to the Department information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to the release of a corresponding draft permit. [Reference: 7 DE Admin. Code 1130 Section 5.2 dated 11/15/93]
- 3. The Owner and/or Operator shall furnish to the Department, upon receipt of a written request and within a reasonable time specified by the Department:
  - i. Any information that the Department determines is reasonably necessary to evaluate or take final action on any permit application submitted in accordance with Condition 2(l) or 2(m) of this permit. The Owner and/or Operator may request an extension to the deadline the Department may impose on the response for such information. [Reference: 7 DE Admin. Code 1130 Section 5.1.2.3 dated 11/15/93]

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#### **Condition 2- General Requirements (Cont.)**

- ii. Any information that the Department requests to determine whether cause exists to modify, terminate, or revoke this permit, or to determine compliance with the terms and conditions of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.5 dated 12/11/00]
- iii. Copies of any records required to be kept by this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.5.7 dated 12/11/00]
- **g.** <u>Emission Trading</u>. No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.9 dated 12/11/00]
- **h.** <u>Fees</u>. The Owner and/or Operator shall pay fees to the Department consistent with the fee schedule established by the Delaware General Assembly. [Reference: 7 DE Admin. Code 1130 Section 6.1.8 dated 12/11/00 and Section 9.0 dated 11/15/93]
- **i.** <u>Inspection and Entry Requirements</u>. Upon presentation of identification, the Owner and/or Operator shall allow authorized officials of the Department to perform the following:
  - 1. Enter upon the Owner and/or Operator's premises where a source is located or an emissions-related activity is conducted, or where records that must be kept under the terms and conditions of this permit are located. [Reference: 7 DE Admin. Code 1130 Section 6.3.2.1 dated 12/11/00]
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.3.2.2 dated 12/11/00]
  - 3. Inspect, at reasonable times and using reasonable safety practices, any facility, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. [Reference: 7 DE Admin. Code 1130 Section 6.3.2.3 dated 12/11/00]
  - 4. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement. [Reference: 7 DE Admin. Code 1130 Section 6.3.2.4 dated 12/11/00]
- j. <u>Permit and Application Consultation</u>. The Owner and/or Operator is encouraged to consult with Department personnel before submitting an application or, at any other time, concerning the operation, construction, expansion, or modification of any installation, or concerning the required pollution control devices or system, the efficiency of such devices or system, or the pollution problem related to the installation. [Reference: 7 DE Admin. Code 1130 Section 5.1.1.7 dated 11/15/93]
- **k.** <u>Permit Availability</u>. The Owner and/or Operator shall have available at the facility at all times a copy of this permit and shall provide a copy of this permit to the Department upon request. [Reference: 7 **DE Admin. Code** 1102 Section 8.1 dated 6/1/97]
- **I.** <u>Permit Renewal</u>. This permit expires on < maximum is no more than the issue date plus 5 years> except as provided in Condition 2(l)(3) below. [Reference: 7 DE Admin. Code 1130 Section 6.1.2 dated 12/11/00]
  - Applications for permit renewal shall be subject to the same procedural requirements, including
    those for public participation, affected state comment, and EPA review, that apply to initial
    permit issuance under 7 **DE Admin. Code** 1130 Section 7.1, except that an application for
    permit renewal may address only those portions of the permit that the Department determines
    require revision, supplementing, or deletion, incorporating the remaining permit terms by
    Reference: from the previous permit. The Department may similarly, in issuing a draft renewal
    permit or proposed renewal permit, specify only those portions that will be revised,

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#### **Condition 2- General Requirements (Cont.)**

supplemented, or deleted, incorporating the remaining permit terms by Reference: [Reference: 7 DE Admin. Code 1130 Section 7.3.1 dated 12/11/00]

- 2. The Owner and/or Operator's right to operate shall cease upon the expiration date unless a timely and complete renewal application has been submitted to the Department no later than 12 months prior to the expiration date of the permit. [Reference: 7 DE Admin. Code 1130 Section 7.3.2 dated 12/11/00]
- 3. The Department shall review each application for completeness and shall inform the applicant within 60 days of receipt if the application is incomplete. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness within 60 days of an application, an application will be deemed complete if it contains the information required by the application form and 7 **DE Admin. Code** 1130 Section 5.4. [Reference: 7 **DE Admin. Code** 1130 Section 5.1.2.1 dated 11/15/93
- 4. If a timely and complete application for a permit renewal is submitted to the Department pursuant to 7 **DE Admin. Code** 1130, Section 5.1.2.4 (dated 11/15/93) and Section 7.3.1 (dated 12/11/00) and the Department, through no fault of the Owner and/or Operator, fails to take final action to issue or deny the renewal permit before the end of the term of this permit, then this permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. [Reference: 7 DE Admin. Code 1130 Section 7.3.3 dated 12/11/00]

#### m. Permit Revision and Termination.

1.

- i. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.7.3 dated 12/11/00]
- ii. Except as provided under Condition 2(m)(3) ["Minor Permit Modification"], the filing of a request by the Owner and/or Operator for a permit modification, revocation and reissuance, or termination, or of a modification of planned changes or anticipated noncompliance does not stay any term or condition of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.3 dated 12/11/00 and 7.5.1.5 dated 12/11/00]
- "Administrative Permit Amendment." When required, the Owner and/or Operator shall submit to the Department a request for an administrative permit amendment in accordance with 7 DE Admin. Code 1130 Section 7.4. [Reference: 7 DE Admin. Code 1130 Section 7.4 dated 12/11/00]
- 3. "Minor Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a minor permit modification in accordance with 7 **DE Admin. Code** 1130 Section 7.5.1 and 7.5.2. [Reference: 7 **DE Admin. Code** 1130 Section 7.5.1 dated 12/11/00 and 7.5.2 dated 12/11/00]
  - i. For a minor permit modification, during the period of time between the time the Owner and/or Operator makes the change or changes proposed in the minor permit modification application and the time that the Department takes action on the application, the Owner and/or Operator shall comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period the Owner and/or Operator, at its own risk, need not comply with the existing terms and conditions of this permit that it seeks to modify. [Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 12/11/00 and 7.5.2.5 dated 12/11/00]

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#### **Condition 2- General Requirements (Cont.)**

- ii. If the Owner and/or Operator fail to comply with its proposed permit terms and conditions during this time period, the existing terms and conditions of this permit may be enforced against the Owner and/or Operator. [Reference: 7 DE Admin. Code 1130 Section 7.5.1.5 dated 12/11/00 and 7.5.2.5 dated 12/11/00]
- 4. "Significant Permit Modification." When required, the Owner and/or Operator shall submit to the Department an application for a significant permit modification in accordance with 7 **DE Admin. Code** 1130 Section 7.5.3. [Reference: 7 **DE Admin. Code** 1130 Section 7.5.3 dated 12/11/00]

5.

- i. When the Owner and/or Operator is required to meet the requirements under Section 112(g) of the Act or to obtain a preconstruction permit under 7 **DE Admin. Code** 1100, the Owner and/or Operator shall file a complete application to revise this permit within 12 months of commencing operation of the construction or modification. [Reference: 7 **DE Admin. Code** 1130 Section 5.1.1.4 dated 11/15/93]
- ii. When the Owner and/or Operator is required to obtain a preconstruction permit, the Owner and/or Operator may submit an application to revise this permit for concurrent processing. The revision request for this permit when submitted for concurrent processing shall be submitted to the Department with the Owner and/or Operator's preconstruction review application or at such later time as the Department may allow. Where this permit would prohibit such construction or change in operation, the Owner and/or Operator shall obtain a permit revision before commencing operation. [Reference: 7 DE Admin. Code 1102 Sections 11.2.10, 11.5 and 12.4, dated 6/11/06, and 7 DE Admin. Code 1130 Section 5.1.1.4 dated 11/15/93]
- iii. Where an application is not submitted for concurrent processing, the Owner and/or Operator shall obtain an operating permit under 7 **DE Admin. Code** 1100 prior to commencing operation of the construction or modification to cover the period between the date operation is commenced and until such time as operation is approved under 7 **DE Admin. Code** 1130. [Reference: 7 **DE Admin. Code** 1102 Section 2.1 dated 6/11/06]
- 6. "Permit Termination." The Owner and/or Operator may at any time apply for termination of this permit in accordance with 7 **DE Admin. Code** 1130 Section 7.8.4 or Section 7.8.5. [Reference: 7 **DE Admin. Code** 1130 Sections 7.8.4 dated 12/11/00 and 7.8.5 dated 12/11/00]

#### n. Permit Transfer.

- 1. A change in ownership or operational control of this facility shall be treated as an administrative permit amendment where the Department has determined that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new owner has been submitted to the Department. [Reference: 7 DE Admin. Code 1130 Section 7.4.1.4 dated 12/11/00]
- 2. In addition to any written agreement submitted by the Owner and/or Operator in accordance with Condition 2(n)(1), the Owner and/or Operator shall have on file at the Department a statement meeting the requirements of 7 **Del. C.,** Ch 79, Section 7902. *This permit condition is state enforceable only.* [Reference: 7 **Del. C.,** Ch 79 Section 7902 dated 8/28/2007]
- 3. The written agreement required in Condition 2(n)(1) of this permit shall be provided to the Department within a minimum of 30 calendar days prior to the specific date for transfer and shall indicate that the transfer is agreeable to both the current and new owner. [Reference: 7 DE Admin. Code 1102 Section 7.1 dated 6/1/97]

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#### **Condition 2- General Requirements (Cont.)**

**o.** <u>Property Rights</u>. This permit does not convey any property rights of any sort, or any exclusive privilege. [Reference: 7 DE Admin. Code 1130 Section 6.1.7.4 dated 12/11/00]

#### p. Risk Management Plan Submissions.

- In the event this stationary source, as defined in the State of Delaware 7 **DE Admin. Code**1201 "Accidental Release Prevention Regulation" Section 4.0, is subject to or becomes subject to
  Section 5.0 of 7 **DE Admin. Code** 1201 (as amended March 11, 2006), the owner or operator
  shall submit a risk management plan (RMP) to the Environmental Protection Agency's RMP
  Reporting Center by the date specified in Section 5.10 and required revisions as specified in
  Section 5.190. A certification statement shall also be submitted as mandated by Section 5.185.
  [Reference: 7 **DE Admin. Code** 1130 Section 6.1.4 dated 12/11/00, 7 **DE Admin. Code** 1201 as amended March 11,
  2006 and Delaware; Approval of Accidental Release Prevention Program, Federal Register Vol. 6, No. 11 pages 3081822 dated June 8, 2001]
- 2. If this stationary source, as defined in 7 **DE Admin. Code** 1201 Section 4.0, is not subject to Section 5.0 but is subject or becomes subject to Section 6.0 (as amended March 11, 2006), the owner or operator shall submit a Delaware RMP to the State of Delaware's Accidental Release Prevention group by the date as specified in Section 6.6.10 and required revisions as specified by Section 6.6.1. *Note: State enforceable only.* [Reference: 7 **DE Admin. Code** 1201 as amended March 11, 2006]

#### q. Protection of Stratospheric Ozone.

When applicable, this Facility shall comply with the following requirements: [Reference: 40 CFR Part 82 "Protection of Stratospheric Ozone" revised as of 7/1/97 and 7 DE Admin. Code 1130 Section 2.0 dated 11/15/93]

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - i. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a process that uses a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - ii. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - iii. The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - iv. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2. Any person servicing, maintaining, or repairing appliances, except for motor vehicles, shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B. In addition, Subpart F applies to refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment.
  - i. Persons owning appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to §82.154 and §82.156.

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#### **Condition 2- General Requirements (Cont.)**

- ii. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
- iii. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
- iv. Persons performing maintenance, service, repair, or disposal of appliances must certify with the Administrator pursuant to §82.158 and §82.162.
- v. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152)
- vi. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- 3. Owners/Operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR Part 82, Subpart F §82.166.
- 4. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, "Production and Consumption Controls".
- 5. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, "Servicing of Motor Vehicle Air Conditioners".
  - i. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant. These systems are regulated under 40 CFR Part 82, Subpart F.
- 6. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program.
- **r. Severability**. The provisions of this permit are severable. If any part of this permit is held invalid, the application of such part to other persons or circumstances and the remainder of this permit shall not be affected thereby and shall remain valid and in effect. [Reference: 7 DE Admin. Code 1130 Section 6.1.6 dated 12/11/00]

### **Condition 3- Specific Requirements**

- a. <u>Emission Limitations Emission Standards, Operational Limitations, and Operational Standards</u>. The Owner and/or Operator shall comply with the limitations and standards detailed in Condition 3 Table 1 of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.1 dated 12/11/00]
- **b.** Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping). The Owner and/or Operator shall maintain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all original strip-chart

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#### **Condition 3- Specific Requirements (Cont.)**

recordings, where appropriate, for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, the permit may specify that records may be maintained in computerized form. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.2 dated 12/11/00]

1.

- i. <u>Specific Requirements</u>. The Owner and/or Operator shall comply with the operational limitations, monitoring, testing, and record keeping requirements detailed in Condition 3 Table 1 which are in addition to those in Conditions 3(b)(1)(ii) and 3(b)(2) of this permit. [Reference: 7 **DE Admin. Code** 1130 Sections 6.1.1 dated 12/11/00, 6.1.3.1 dated 12/11/00, and 6.1.10 dated 12/11/00]
- ii. <u>General Testing Requirements</u>. Upon written request of the Department, the Owner and/or Operator shall, at the Owner and/or Operator's expense, sample the emissions of, or fuel used by, an air contaminant emission source, maintain records, and submit reports to the Department on the results of such sampling. [Reference: 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]
- iii. The Department must observe all stack emission testing and monitor certification testing including any test audits conducted on the monitors as part of the Quality Assurance Program for the results to be considered for acceptance unless the Department determines in advance, in writing, that the test need not be observed. Further, the Department may in its discretion determine based on its observation of the test that it need not observe the entire test. [Reference: 7 DE Admin. Code 1117 Section 2.2 dated 7/17/84]
- iv. All monitor performance specification testing and stack emissions testing shall require the submission of a "Source Sampling Guidelines and Preliminary Survey Form" which must be found acceptable to the Department at least 30 days prior to the testing. [Reference: 7 DE Admin. Code 1120, Section 1.4, dated 12/7/88]
- v. The results of all monitor performance specification testing and stack emission testing shall be submitted to the Department, in triplicate, within 60 days after completion of the testing. [Reference: 7 DE Admin. Code 1120, Section 1.4, dated 12/7/88]
- 2. <u>General Record Keeping Requirements</u>. The Owner and/or Operator shall record, at a minimum, all of the following information:
  - i. If required, for each operating scenario identified in Condition 3 Table 1 of this permit, a log that indicates the operating scenario under which each particular emission unit is operating. The Owner and/or Operator shall, contemporaneously with changing from one operating scenario to another, record in this log the time at which the operating scenario under which it is operating is changed. [Reference: 7 DE Admin. Code 1130 Section 6.1.10 dated 12/11/00]
  - ii. The following information to the extent specified in Condition 3 Table 1 of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1 dated 12/11/00]
    - A. The date, place, and time of the sampling or measurements. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.1 dated 12/11/00]
    - B. The dates analyses were performed. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.2 dated 12/11/00]
    - C. The Owner and/or Operator or entity that performed the analyses. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.3 dated 12/11/00]

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#### **Condition 3- Specific Requirements (Cont.)**

- D. The analytical techniques or methods used. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.4 dated 12/11/00]
- E. The results of such analyses. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.5 dated 12/11/00]
- F. The operating conditions as existing at the time of sampling or measurement. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.2.1.6 dated 12/11/00]
- iii. If the Owner and/or Operator is claiming the affirmative defense of emergency or malfunction as provided in Condition 2(b)(5); a properly signed, contemporaneous operating logs, or other relevant evidence which indicates that: [Reference: 7 DE Admin. Code 1130 Section 6.7.3 dated 12/11/00]
  - A. An emergency or malfunction occurred and the causes of the emergency or malfunction. [Reference: 7 DE Admin. Code 1130 Section 6.7.3.1 dated 12/11/00]
  - B. The facility was at the time of the emergency or malfunction being operating in a prudent and professional manner and in compliance with the generally accepted industry operations and maintenance procedures. [Reference: 7 DE Admin. Code 1130 Section 6.7.3.2 dated 12/11/00]
  - C. During the period of the emergency or malfunction the Owner and/or Operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.7.3.3 dated 12/11/00]
- iv. A copy of the written notice required by Condition 3(c)(2)(iii) for each change made under Condition 4(c) [Operational Flexibility] of this permit shall be maintained with a copy of this permit. [Reference: 7 **PE Admin. Code** 1130 Section 6.8.1 dated 12/11/00]

#### c. Reporting and Compliance Certification Requirements.

1. <u>Specific Reporting/Certification Requirements</u>. The Owner and/or Operator shall comply with the Reporting/Certification Requirements detailed in Condition 3— Table 1 of this permit, which are in addition to those of Conditions 3(c)(2) and 3(c)(3) of this permit. Each report that contains any deviations from the terms of Condition 3— Table 1 shall identify the probable cause of the deviations and any corrective actions or preventative measures taken. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3 dated 12/11/00, 6.1.3.3.3.3 dated 12/11/00, and 6.1.3.3.3.4 dated 12/11/00]

#### 2. <u>General Reporting Requirements</u>.

- i. The Owner and/or Operator shall submit to the Department a report of any required monitoring not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the period July 1 through December 31 of the previous calendar year) of each calendar year. Each report shall identify any deviations from the monitoring, record keeping, and reporting requirements under this permit; and the probable cause of the deviations; and any corrective actions or preventative measures taken. If no deviations have occurred, such shall be stated in the report. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.1 dated 12/11/00, 6.1.3.3.2 dated 12/11/00, and 6.1.3.3.3.4 dated 12/11/00]
- ii. In addition to the semiannual monitoring reports required under Condition 3(c)(2)(i), the Owner and/or Operator shall submit to the Department supplemental written reports and/or notices identifying all deviations from permit conditions, probable cause of the deviations, and any corrective actions or preventative measures as follows: [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 12/11/00 and 6.1.3.3.3.4 dated 12/11/00]

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#### **Condition 3- Specific Requirements (Cont.)**

- A. If the Owner and/or Operator is claiming the affirmative defense of emergency or malfunction as provided in Condition 2(b)(5) of this permit, a notice of any deviation resulting from emergency or malfunction conditions shall be reported to the Department within two working days of the time when the technology-based emission limitations were exceeded. Such notice shall contain a description of the emergency or malfunction, any steps taken to mitigate emissions, and any corrective actions taken. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.1 dated 12/11/00 and 6.7.3.4 dated 12/11/00]
- B. Emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department immediately upon discovery and after activating the appropriate site emergency plan, in the following manner: [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 12/11/00 and 6.1.3.3.3.2 dated 12/11/00]
  - 1. By calling the Department's Environmental Emergency Notification and Complaint number (800) 662-8802, if the emission poses an imminent and substantial danger to public health, safety or the environment. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.3.2 dated 12/11/2000]
  - 2. Other emissions in excess of any permit condition or emissions which create a condition of air pollution may be called in to the Environmental Emergency Notification and Complaint number (800) 662-8802 or faxed to (302) 739-2466. The ability to fax in notifications may be revoked upon written notice to the Company by the Department in its sole discretion. [Reference: 7 DE Admin. Code No 1130, Section 6.1.3.3.3.2 dated 12/11/2000]
  - 3. In addition to complying with Condition 3)(c)(2)(ii)(B)(1) and (2) of this permit, the Owner/Operator shall satisfy any reporting required by the "Reporting of a Discharge of a Pollutant or an Air Contaminant" regulation, within 30 calendar days of becoming aware of an occurrence subject to reporting pursuant to these conditions. All reports submitted to the Department shall be submitted in writing and shall include the following information: [Reference Regulation No. 30 Sections 6.1.3.3.3.3 dated 12/11/2000 and 6.1.3.3.3.4, dated 12/11/2000]
    - i. The name and location of the facility;
    - ii. The subject sources that caused the emissions;
    - iii. The time and date of the first observation of the excess emissions;
    - iv. The cause and expected duration of the excess emissions;
    - For sources subject to numerical emission limitations, the estimated rate of emissions (expressed in the units of the applicable emission or operational limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
    - vi. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.

Emissions on the same day from the same emission unit may be combined into one report. Emissions from the same cause that occur contemporaneously may also be combined into one report. The Owner/Operator shall submit an electronic copy of all required reports to the Department's compliance engineer assigned to the Refinery.

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#### **Condition 3- Specific Requirements (Cont.)**

- C. All emissions in excess of any permit condition or emissions which create a condition of air pollution shall be reported to the Department in a written report pursuant to Condition 3(c)(2)(1) and/or the specific reporting requirements listed in Condition 3 Table 1 of this permit. [Reference: 7 DE Admin. Code 1130 Sections 6.1.3.3.3.3 dated 12/11/00 and 6.1.3.3.3.4 dated 12/11/00]
- D. Discharges to the atmosphere in excess of any quantity specified in the 7 **DE Admin. Code** 1203 ("**Reporting of a Discharge of a Pollutant or an Air Contaminant**") shall be reported, immediately upon discovery and after activating the appropriate site emergency plan, either in person or to the Department's 24-hour Environmental Emergency Notification and Complaint line (1-800-662-8802). Discharges in compliance with this permit and excess emissions previously reported under Condition 3(c)(2)(ii)(B) of this permit are exempt from this reporting requirement. [Reference: 7 **DE Admin. Code** 1130 Section 6.1.3.3.3.5 dated 12/11/00 and 7 **DE Admin. Code** 1203]
- iii. Prior to making a change as provided in Condition 4 [Operational Flexibility] of this permit the Owner and/or Operator shall give written notice to the Department and EPA at least seven calendar days before the change is to be made. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
  - A. The seven day period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
  - B. If less than seven calendar days notice is provided because of a need to respond more quickly to such unanticipated conditions, the Owner and/or Operator shall provide notice to the Department and EPA as soon as possible after learning of the need to make the change, together with the reasons why advance notice could not be given. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
  - C. The written notice shall include all of the following information: [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
    - <u>1.</u> The identification of the affected emission units and a description of the change to be made.
    - 2. The date on which the change will occur.
    - 3. Any changes in emissions.
    - <u>4.</u> Any permit terms and conditions that are affected, including any new applicable requirements.
- iv. The Owner and/or Operator shall submit to the Department an annual emissions statement in accordance with 7 **DE Admin. Code** 1117 Section 7.0 not later than April 30 of each year, or other date as established by the Department, unless an extension by the Department is granted. Such emissions statement shall cover the preceding calendar year. [Reference: 7 DE Admin. Code 1117 Section 7.0 dated 1/11/93]
- v. If required, the Owner and/or Operator shall submit to the Department a progress report for applicable requirements identified in Condition 5 Table 1 of this permit. Such reports shall be submitted not later than the first day of August (covering the period from January 1 through June 30 of the current calendar year) and the first day of February (covering the

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#### **Condition 3- Specific Requirements (Cont.)**

period July 1 through December 31 of the previous calendar year) of each calendar year. Each progress report shall include the following: [Reference: 7 **DE Admin. Code** 1130 Sections 5.4.8 dated 11/15/93 and 6.3.4 dated 12/11/00]

- A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved. [Reference: 7 DE Admin. Code 1130 Section 6.3.4.1 dated 12/11/00]
- B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [Reference: 7 DE Admin. Code 1130 Section 6.3.4.2 dated 12/11/00]
- vi. Nothing herein shall relieve the Owner and/or Operator from any reporting requirements under federal, state, or local laws. [Reference: 7 DE Admin. Code 1130 Section 6.1.3.3.3.5 dated 12/11/00]

#### 3. General Compliance Certification Requirements.

- i. Compliance with terms and conditions of this permit shall be certified to the Department not later than the first day of February of each year unless the terms or conditions in Condition 3– Table 1 of this permit require compliance certifications to be submitted more frequently. Such certification shall cover the previous calendar year and shall be submitted on Form AQM-1001BB. The Compliance Certification shall include the following information: [Reference: 7 DE Admin. Code 1130 Section 6.3.5.1 dated 12/11/00]
  - A. The identification of each term or condition of the permit that is the basis of the certification. [Reference: 7 **DE Admin. Code** 1130 Section 6.3.5.3.1 dated 12/11/00]
  - B. The Owner and/or Operator's current compliance status, as shown by monitoring data and other information reasonably available to the Owner and/or Operator. [Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.2 dated 12/11/00]
  - C. Such certification shall indicate whether compliance was continuous or intermittent during the covered period. [Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.3 dated 12/11/00]
  - D. The methods used for determining the compliance status of the Owner and/or Operator, currently and over the reporting period as required by the monitoring, record keeping, and reporting required under Condition 3. [Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.4 dated 12/11/00]
  - E. Such other facts as the Department may require to determine the compliance status of the source. [Reference: 7 DE Admin. Code 1130 Section 6.3.5.3.5 dated 12/11/00]
- ii. Each compliance certification shall be submitted to the Department and EPA and shall be certified in accordance with Condition 2(a) of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.3.5.4 dated 12/11/00]
- iii. Any additional information possessed by the Owner and/or Operator that demonstrates non-compliance with any applicable requirement must also be used as the basis for compliance certifications. [Reference: 62 FR 8314 dated 2/24/97]

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#### **Condition 3 – Table 1: Specific Requirements**

Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards

Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)

**Reporting and Compliance Certification** 

a. Emission Unit 80: Boiler 80-1 (618 mmBtu/hr, Boiler 80-2 (716 mmBtu/hr), Boiler 80-3 (618 mmBtu/hr), Boiler 80-4 (737 mmBtu/hr), (Emission Point 80-1)

#### 1. [RESERVED]

- 2. Conditions Applicable to Multiple Pollutants:
- Operational Limitations: [Reference APC-90/0288(A5), APC-90/0289(A6), 90/0290(A5) and APC-90/0291]
  - A. No liquid fuels shall be burned in any of the boilers. Only desulfurized refinery fuel gas (RFG) or natural gas may be fired in Boilers 80-1, 80-2 and 80-4. Only desulfurized RFG, natural gas or syngas may be fired in Boiler 80-3.
  - B. [RESERVED]
  - C. [RESERVED]
  - D. **[RESERVED]**
  - E. Except during periods of startup and shutdown, the burner steam injection and flue gas recirculation systems in Boiler 2 shall be working in a manner consistent with maintaining 0.04 lb/MMBtu NOx on a 24 hour rolling average.
  - F. [RESERVED]
  - G. [RESERVED]
  - H. The Owner/Operator shall not cause or allow the combustion of any fuel in Boiler 80-4 at a rate that exceeds the boiler design capacity of 737 MMBtu/hr averaged over a rolling 365 day period. [Reference 7 DE Admin. Code 1102 Section 11.8, dated 06/01/1997]
  - I. The H<sub>2</sub>S content of the RFG shall not exceed 0.10 grain/dscf on a 3 hour rolling average. [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290A5) and APC-97/0503(A3)]

- ii. Compliance Method: [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5) and APC-90/0291]
  - A. Compliance with Operational Limitation (A) shall be based Premcor demonstrating that only the allowable fuels and no other fuels have been combusted in the boilers during the compliance period and on the Monitoring/Testing requirements.
  - B. [RESERVED]
  - C. [RESERVED]
  - D. Compliance with Operational Limitation (E) shall be based on maintaining the manufacturer's recommended steam injection and flue gas recirculation rates. The rates may be adjusted based on the experience of the Owner/Operator with these controls, consistent with minimizing emissions and good engineering practices.
  - E. [RESERVED]
  - F. Compliance with Operational Limitation (H) shall be based on Monitoring/Testing requirements.
  - G. Compliance with Operational Limitation (I) shall be based on the  $H_2S$  CEMS.
  - H. Comply with "Combined Limits" in Condition 3 Table 1.f.
- iii. Monitoring/Testing:

v. Reporting:

In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

- A. [RESERVED]
- B. **[RESERVED]**
- C. **[RESERVED]**
- D. [RESERVED]
- E. [RESERVED]
  F. [RESERVED]
- G. The Owner/Operator shall notify the Department in writing prior to making any material changes which cause these units to fall under the authority of Title IV of the Clean Air Act.
- H. [RESERVED]
- The Owner/Operator shall submit the following quarterly CEMS reports by January 30, April 30, July 30 and October 30 of each calendar year:
  - The H<sub>2</sub>S CEMS reports shall include the information required by 40 CFR 60.7(c) and (d). [Reference 40 CFR 60.7(c) and (d)]
- J. Comply with "Combined Limits" in Condition 3 Table 1.f.
- K. [RESERVED]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
J. Comply with "Combined Limits" in Condition 3 - Table 1.f.	In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall:  A. [RESERVED] B. [RESERVED] C. [RESERVED] D. [RESERVED] E. [RESERVED] F. [RESERVED] G. The Owner/Operator shall continuously monitor and record the fuel flow rates for each boiler. [Reference 7 DE Admin Code 1130 Section 6.1.3.1.2, dated 12/11/2000] H. The Owner/Operator shall continuously monitor and record the concentration (dry basis) of H <sub>2</sub> S in RFG before it is combusted in any fuel burning device. The H <sub>2</sub> S monitor shall be located downstream of all process steps that increase the concentration of H <sub>2</sub> S in RFG prior to its being combusted in any fuel burning device. The monitoring instrument shall conform to the QA/QC requirements in 40 CFR 60, Appendix "F." The monitoring instrument shall conform to the requirements of Performance Specification 7 of 40 CFR 60, Appendix "B." The Relative accuracy evaluations shall be conducted using Method 11 of 40 CFR Part 60, Appendix "A." [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)] I. Comply with "Combined Limits" in Condition 3 - Table 1.f.	[Reference APC-90/0288(A5), APC-90/0289 A6), APC-90/0290(A5), APC-90/0291 and APC-97/0503(A3)]  vi. Certification Requirement:  That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ul> <li>iv.Recordkeeping:         <ul> <li>In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the</li> <li>Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</li> </ul> </li> <li>A. The Owner/Operator shall maintain all records necessary for determining compliance with this permit in accordance with Condition 3(b). [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5) and APC-90/0291]</li> <li>B. Comply with "Combined Limits" in Condition 3 - Table 1.f.</li> </ul>	
3. Particulate Emissions:		
<ul> <li>i. Emission Standards: [Reference APC-90/0288(A5), APC-90/0289(A6), and APC-90/0290(A5)]</li> <li>A. [RESERVED]</li> <li>B. PM<sub>10</sub> emissions including H<sub>2</sub>SO<sub>4</sub> shall not exceed the following limits:         <ol> <li>0.0104 lb/mmBtu heat input when firing natural gas or refinery fuel gas in Boilers 80-1, 80-2 and 80-3.</li> <li>0.026 lb/mmBtu heat input when firing syngas in Boiler 80-3.</li> <li>24 TPY from Boiler 80-1.</li> <li>27.8 TPY from Boiler 80-2.</li> </ol> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5) and APC-90/0291]</li> <li>A. Compliance with PM<sub>10</sub> Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers.</li> <li>B. Compliance with TSP Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers.</li> <li>C. [RESERVED]</li> </ul>	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
<ul> <li>5. 92 TPY from Boiler 80-3.</li> <li>C. [RESERVED]</li> <li>D. TSP emissions shall not exceed the following limits: <ol> <li>0.0062 lb/mmBtu heat input when firing natural gas or refinery fuel gas in Boilers 80-1, 80-2 and 80-3.</li> <li>0.0074 lb/mmBtu heat input when firing</li> </ol> </li></ul>	<ul> <li>iv.Monitoring/Testing:</li> <li>In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall:</li> <li>A. The Owner/Operator shall conduct the following stack tests annually, in accordance with Condition 3(b):</li> <li>1. EPA Reference Method 5 for TSP.</li> <li>2. EPA Reference Method 5B/202 for PM<sub>10</sub>,</li> </ul>	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
syngas in Boiler 80-3.  3. 13.5 TPY from Boiler 80-1. 4. 15.7 TPY from Boiler 80-2. 5. 13.5 TPY from Boiler 80-3.  E. [RESERVED]  F. [RESERVED]  ii. Operational Limitations:    Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).	including H <sub>2</sub> SO <sub>4</sub> .  3. The Owner/Operator may petition the Department to decrease the frequency of TSP or PM <sub>10</sub> performance tests based on the results of any performance testing.  B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii (EU-80).  v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv (EU-80).	
<ul> <li>4. Sulfur Dioxide (SO<sub>2</sub>): <ol> <li>i. Emission Standards:</li> <li>A. [RESERVED]</li> <li>B. The Owner/Operator shall not cause or allow the emission of SO<sub>2</sub> in excess of the following limits: <ol> <li>Boiler 80-1: 61.4 TPY</li> <li>Boiler 80-2: 71.2 TPY</li> <li>Boiler 80-3: 778.9 TPY </li> <li>[Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)]</li> </ol> </li> <li>ii. Operational Limitations: <ol> <li>Comply with "Conditions Applicable to Multiple</li> </ol> </li> </ol></li></ul>	iii. Compliance Method: [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)]  A. Compliance with the SO <sub>2</sub> Emission Standards for Boiler 80-3 shall be based on the SO <sub>2</sub> Continuous Emissions Monitoring System (CEMS) for Boiler 80-3.  B. Compliance with the SO <sub>2</sub> Emission Standards for Boilers 80-1 and 80-2 shall be demonstrated by complying with the fuel gas monitored H <sub>2</sub> S content limitations as measured by the H <sub>2</sub> S Continuous Monitoring System (CMS) for Boilers 80-1	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. [RESERVED]  viii. Certification Requirement: In addition to the requirements of Condition 3(c)(3) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Pollutants" in Condition 3 - Table 1.a.2 (EU-80).	iv. Monitoring/Testing: In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall: A. The Owner/Operator shall operate and maintain SO2 CEMS for 80-3. [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)] B. The SO2 CEMS shall conform to Performance Specification 2 of 40 CFR 60, Appendix "B." The Quality Assurance/Quality Control (QA/QC) procedures for SO2 CEMS for this boiler shall be established in accordance with 40 CFR 60, Appendix "F". [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)] C. [RESERVED] D. [RESERVED] E. [RESERVED] V. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. The Owner/Operator shall maintain SO2 CEMS data, calibration and audit results in accordance with Condition 3(b). [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]	A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 – Table 1.a.2.v (EU-80).

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<ul> <li>i. Emission Standards: [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)]</li> <li>A. [RESERVED]</li> <li>B. The Owner/Operator shall not cause or allow the emission of NO<sub>X</sub> in excess of the following baseline emission levels for the boilers: <ol> <li>Boiler 80-1: 541.4 TPY</li> <li>Boiler 80-2: 125.4 TPY</li> <li>Boiler 80-3: 541.4 TPY</li> </ol> </li> <li>C. The NO<sub>X</sub> emissions shall not exceed the following levels based on a 24-hour rolling average basis: <ol> <li>0.20 lb/mmBtu for Boilers 80-1, 80-3 and 80-4.</li> <li>0.04 lb/mmBtu for Boiler 80-2.</li> </ol> </li> <li>D. [RESERVED] <ol> <li>[RESERVED]</li> <li>(Operational Limitation: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).</li> </ol> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>A. Compliance with the NOx Emission Standards shall be based on Continuous Emissions Monitoring System (CEMS) for NOx and CO2 for Boilers 80-1, 80-2 and 80-3</li> <li>B. Compliance with a less stringent (higher) emission limit shall be based on compliance with a more stringent limit.</li> <li>iv. Monitoring/Testing: <ul> <li>In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall:</li> <li>A. The Owner/Operator shall operate and maintain NOx and CO2 CEMS for the boilers. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>B. The QA/QC procedures for NOx and CO2 CEMS shall be established in accordance with 40 CFR 60, Appendix "F". [Reference APC-90/0288(A5), APC-90/0290(A5)]</li> </ul> </li> <li>v. Recordkeeping: <ul> <li>In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</li> <li>A. The Owner/Operator shall maintain NOx CEMS data, calibration and audit results in accordance with Condition 3(b). [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>B. [RESERVED]</li> </ul> </li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 – Table 1.a.2.v (EU-80).  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<ul> <li>6. Carbon Monoxide (CO):</li> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>A. [RESERVED]</li> <li>B. The Owner/Operator shall not cause or allow the emissions of CO in excess of 0.034 lb/mmBtu from Boilers 80-1, 80-2 and 80-3 on a 24 hour rolling average basis.</li> <li>C. The Owner/Operator shall not cause or allow the emission of CO in excess of the following limits: <ol> <li>92 TPY for Boiler 80-1.</li> <li>106.6 TPY for Boiler 80-2.</li> <li>92 TPY for Boiler 80-3.</li> </ol> </li> <li>ii. Operational Limitations: <ol> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).</li> </ol> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)] Compliance with the CO Emission Standards shall be demonstrated by the following methods: A. [RESERVED] B. Stack test based emissions factor and fuel flow rates for Boilers 80-1 and 80-3. C. CEMS for Boiler 80-2.</li> <li>iv. Monitoring/Testing: In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)] A. The Owner/Operator shall conduct an annual stack test for CO using EPA Reference Method 10 and in accordance with Condition 3(b) unless the Department approves less frequent testing.</li> <li>B. The Owner/Operator shall operate and maintain CO CEMS for Boiler 80-2.</li> <li>C. The CO CEMS shall conform to the applicable Performance Specifications in 40 CFR Part 60, Appendix "B." The QA/QC procedures for the CO CEMS shall be established in accordance with the procedures in 40 CFR Part 60, Appendix "F."</li> <li>v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the</li> </ul>	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. For Boiler 80-2, the Owner/Operator shall maintain CO CEMS data, calibration and audit results in accordance with Condition 3(b).  B. For Boilers 80-1, 80-3 and 80-4, the Owner/Operator shall comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv (EU-80).	
<ul> <li>7. Volatile Organic Compounds (VOC):</li> <li>i. Emission Standards: [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)]</li> <li>A. [RESERVED]</li> <li>B. VOC emissions shall not exceed the following limits: <ul> <li>1. 0.0014 lb/mmBtu from Boilers 80-1, 80-2 and 80-3.</li> <li>2. [RESERVED]</li> </ul> </li> <li>C. The Owner/Operator shall not cause or allow the emission of VOC in excess of the following limits: <ul> <li>1. 3.8 TPY from Boiler 80-1.</li> <li>2. 4.4 TPY from Boiler 80-2.</li> <li>3. 3.8 TPY from Boiler 80-3.</li> </ul> </li> <li>ii. Operational Limitations: <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).</li> </ul> </li> </ul>	<ul> <li>iii. Compliance Method: Compliance with the VOC Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers. [Reference APC-90/0288(A5), APC-90/0289(A6), APC-90/0290(A5)]</li> <li>iv. Monitoring/Testing: In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall: A. The Owner/Operator shall conduct annually an EPA Reference Method 25 A stack test for VOC, in accordance with Condition 3(b). The Owner/Operator may petition the Department to decrease the frequency of VOC performance tests based on the results of any performance testing.</li> <li>B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii (EU-80).</li> </ul>	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv (EU-80).	
<ul> <li>8. Sulfuric Acid Mist (H<sub>2</sub>SO<sub>4</sub>):</li> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>A. [RESERVED]</li> <li>B. The Owner/Operator shall not cause or allow the emission of H<sub>2</sub>SO<sub>4</sub> in excess of the following limits: <ul> <li>1. 9.4 TPY for Boiler 80-1.</li> <li>2. 10.9 TPY for Boiler 80-2.</li> <li>3. 71.6 TPY for Boiler 80-3.</li> </ul> </li> <li>C. [RESERVED]</li> <li>ii. Operational Limitations: <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).</li> </ul> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>A. Compliance shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers.</li> <li>B. [RESERVED]</li> <li>C. Compliance for the boiler 80-3 shall be demonstrated by applying the stack test based SO<sub>2</sub> to H<sub>2</sub>SO<sub>4</sub> conversion factor to the CEMS-monitored SO<sub>2</sub> emissions.</li> <li>D. Compliance for Boilers 80-1 and 80-2 shall be demonstrated by applying the fuel gas monitored H<sub>2</sub>S content to the H<sub>2</sub>SO<sub>4</sub> conversion factor.</li> <li>iv. Monitoring/Testing: <ul> <li>In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall:</li> <li>A. The Owner/Operator shall conduct annually an EPA Reference Method 8 stack test for H<sub>2</sub>SO<sub>4</sub>, in accordance with Condition 3(b).</li> </ul> </li> </ul>	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	H <sub>2</sub> SO <sub>4</sub> performance tests based on the results of any performance testing.  B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii (EU-80).  v. Recordkeeping:     In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv (EU-80).	
9. [RESERVED]		
<ul> <li>i. Emission Standard:     The Owner/Operator shall not cause or allow the emission of visible air contaminants from this unit in excess of 20% opacity for an aggregate of more than 3 minutes in any 1 hour period, or more than 15 minutes in any 24 hour period. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]</li> <li>ii. Operational Limitations:     Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2 (EU-80).</li> </ul>	<ul> <li>iii. Compliance Method:     Compliance with the visible Emission Standard shall be demonstrated by a Continuous Opacity Monitoring System (COMS) for Boilers 80-1, 80-2, 80-3 and 80-4 in the common stack. [Reference APC-90/0288 (A5), APC90/0289 (A6), APC-90/0290 (A5)]</li> <li>iv. Monitoring/Testing:     In addition to the requirements of Conditions 3(b)(1)(ii) of this permit, the Company shall: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]     A. The Owner/Operator shall operate and maintain a COMS for Boilers 80-1, 80-2, 80-3 and 80-4 in the common stack.</li> <li>B. The COMS shall be maintained in</li> </ul>	vi. Compliance Method: A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v (EU-80).  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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## Table 1. Cassific Descriptor (continued)

Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
accordance with Performance Specification 1 in 40 CFR 60, Appendix "B."  v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. The Owner/Operator shall maintain COMS data, calibration and audit results. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]	
ce AQM-003/00016-CAIR]  Operator must follow for purposes of the Acid Rain Prog	ıram:
<ul> <li>v. Compliance Method: Compliance with the SO<sub>2</sub> requirements shall be based on Monitoring, Recordkeeping and Reporting Requirements.</li> <li>vi.Monitoring Requirements: A. The Owner/Operator and, to the extent applicable, designated representative shall comply with the monitoring requirements as provided in 40 CFR Part 75.</li> <li>B. The emissions measurements recorded and reported in accordance with 40 CFR Part 75.</li> </ul>	viii. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. The Owner/Operator's designated representative shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 Subpart I and 40 CFR Part 75.
	(Monitoring, Testing, QA/QC Procedures, and Record Keeping)  accordance with Performance Specification 1 in 40 CFR 60, Appendix "B."  v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. The Owner/Operator shall maintain COMS data, calibration and audit results. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5)]  ce AQM-003/00016-CAIR] Operator must follow for purposes of the Acid Rain Progressed on Monitoring, Recordkeeping and Reporting Requirements.  vi. Monitoring Requirements: A. The Owner/Operator and, to the extent applicable, designated representative shall comply with the monitoring requirements as provided in 40 CFR Part 75. B. The emissions measurements recorded and

<u>2</u>. [RESERVED]

separate requirement.

each ton of allowances constitutes a

B. [RESERVED]

- shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for SO<sub>2</sub> under the Acid Rain Program.
- ix. [RESERVED]
- X. [RESERVED]
- xi. Certification:

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Condition 3 – Table 1: Specific Requirements (continued)		
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<ul> <li>C. [RESERVED]</li> <li>D. The Owner/Operator's allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.</li> <li>E. The Owner/Operator shall not deduct allowances in order to comply with the requirements under paragraph (A) above prior to the calendar year for which the allowance was allocated.</li> <li>F. [RESERVED]</li> <li>G. [RESERVED]</li> <li>iii. [RESERVED]</li> <li>iv. Excess Emissions Requirements: <ul> <li>A. The Owner/Operator's designated representative shall submit a proposed offset plan, as required under 40 CFR Part 77 if Boiler 4 has excess emissions in any calendar year.</li> <li>B. If Boiler 4 has excess emissions in any calendar year, the Owner/Operator shall: <ol> <li>Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and</li> <li>Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.</li> </ol> </li> </ul></li></ul>	C. [RESERVED]  D. The Owner/Operator shall continuously monitor and record the concentration (dry basis) of TRS in RFG before it is combusted in Boiler 4. The TRS monitor shall be located downstream of all process steps which impact the composition of RFG prior to its being combusted in Boiler 4. The TRS monitor shall conform to the QA/QC requirements recommended by the manufacturer's specifications and listed in the QA/QC Plan for the TRS monitor. The TRS monitor shall conform to Performance Specification 5 of 40 CFR Part 75, Appendix "B." Relative accuracy evaluations shall be conducted using Method 15 of 40 CFR Part 75, Appendix "A."  E. [RESERVED]  vii. Recordkeeping:  Unless otherwise provided, the Owner/Operator shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Department or the Administrator.  A. The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR	In addition to the requirements of Condition 3(c)(3) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. Each document required to be submitted to the Department and the Administrator pursuant to the Acid Rain provisions of this permit shall be signed and certified by the Designated Representative and shall contain the following language:  "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information information, including the possibility of fine or imprisonment."

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ul> <li>72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.</li> <li>B. All emissions monitoring information, in accordance with 40 CFR Part 75.</li> <li>C. Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.</li> <li>D. Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.</li> </ul>	
<ul><li>b. Emission Unit 82 Texaco Gasifiers 82-1a &amp; 82-2</li><li>1. Conditions Applicable to Multiple Pollutants:</li></ul>	2a, Gas Coolers 82-1b & 82-2b (Fugitive Emissions, No	Emission Points)
i. Operational Limitations:  A. Fugitive emissions of Volatile Organic Compounds (VOC) from the gasification process shall be subject to the Leak Detection and Repair requirements in 40 CFR 60, subpart VV and to the requirements in 7 <b>DE Admin. Code</b> 1124 Section 29. [Reference APC-97/0504]  B. [RESERVED]	ii. Compliance Method:  A. Compliance with Operational Limitation (A) shall be based on the requirements of the Department approved facility-wide Leak Detection and Repair (LDAR) Program that addresses the fugitive emissions of Volatile Organic Compounds (VOC). [Reference APC-97/0504]  B. [RESERVED]	v. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. The Owner/Operator shall follow the reporting requirements of 40 CFR 60, Subpart VV and 7 DE Admin. Code 1124, Section 29.11. [Reference 7 DE Admin. Code 1124, Section 29.11, dated 11/29/1994].

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ul> <li>iii. Monitoring/Testing: [Reference APC-97/0504] None in addition to those listed in Condition 3(b)(1)(ii) of this permit.</li> <li>iv. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00] A. The Owner/Operator shall maintain all records pursuant to 40 CFR 60, Subpart VV and 7 DE Admin. Code 1124, Section 29.10. [Reference 7 DE Admin. Code 1124, Section 29.10, dated 11/29/1994] B. [RESERVED] C. [RESERVED]</li> </ul>	vi. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
2. [RESERVED]		
<ul> <li>c. Emission Unit 82 (cont'd) and 50: Amine Acid Mechanical Draft Cooling Tower 50 (Emission Poir</li> <li>1. Conditions Applicable to Multiple Pollutants:</li> </ul>	l Gas Removal System 82-3, <mark>Syngas Flare 82-4 (Emissi</mark> nt 50)	on Points 82-1and 82-2) Three-Cell Linear
i. Operational Limitations: [Reference APC-97/0504]  A. Syngas may be diverted to the flare during periods when process upsets, malfunctions, safety trips, start-ups or shut-downs occur in the combustion turbines, gasification section, gas cooling section, the amine acid gas removal system, the slurry preparation section, Boiler 3, the refinery sulfur recovery unit or in the air separation plant.  B. The Owner/Operator shall take all necessary steps to ensure that the duration	<ul> <li>ii. Compliance Method: [Reference APC-97/0504]         Compliance shall be based on Recordkeeping and Reporting requirements and on information available to the Department which may include, but is not limited to, monitoring results, opacity and process operating data.     </li> <li>iii. Monitoring/Testing:         None in addition to those listed in Condition 3(b)(1) of this permit.     </li> </ul>	v. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] The Owner/Operator shall submit semi-annual reports. The reports for the preceding semi-annual period shall be submitted to the Department by January 31 and July 31 of each calendar year for the semi-annual period. The summary shall include: [Reference APC-97/0504]

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Condition 5 Table 1. Specific Requirements (continued)		
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
of each flaring event is minimized. The total duration of clean syngas flaring during periods of process upset and malfunction shall not exceed 800 hours in any rolling 12 month period.  C. The Department reserves the right to revisit the above 800-hour limit at the time of permit renewal and revise it based on actual operating history.  D. Upon commencement of a raw syngas flaring event when one gasifier train is operating, the coke feed to the gasifier shall be reduced to 840 tons per day of coke within 2 hours. This 840 tons per day limit is only applicable to the gasifier in the raw syngas flaring mode and does not apply to the other gasifier so long as it is producing clean syngas through the AGR. If during two train operation, both trains experience a raw syngas flaring event, then coke feed to each gasifier shall be reduced to 600 tons per day within 2 hours.	iv.Recordkeeping:  In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. [RESERVED]  B. The following records shall be maintained:  1. Record of all periods of start up, shut down and process upsets that cause syngas to be flared. Flare emissions shall be reportable to the Department in accordance with the requirements of Section 304 of the Emergency Planning and Community Right to Know Act of 1986 and the Reporting requirements listed below. [Reference APC-97/0504]  2. Record of all durations of flaring events and description of event including: (1) the date, time and duration of the flaring event; (2) whether the flaring was smokeless; (3) the type of syngas flared (raw; raw/clean or clean); (4) the reason(s) and/or cause(s) of the flaring event; and (5) any corrective action taken as a result of the flaring event. [Reference APC-97/0504]	<ul> <li>A. All periods of flaring events with a description of each event including steps taken to minimize each flaring duration and steps taken to prevent similar occurrences in the future.</li> <li>B. During periods of flaring, the calculated raw syngas production rate, the measured clean syngas flow rate, the heat content of the syngas, hourly coke slurry feed rate to each gasifier, and the sulfur content of the coke slurry feed to each gasifier on a daily average basis and on a rolling twelve month average basis.</li> <li>C. Calculated cumulative rolling 12 month flare emissions of SO<sub>2</sub>, NO<sub>x</sub> and CO during startups and shutdowns of gasification section, gas cooling section, the amine acid gas removal system, combustion turbines, sulfur recovery unit, slurry preparation system or air separation plant.</li> <li>D. Calculated duration of syngas flaring during periods when start-ups, shutdowns, process upsets, malfunctions and safety trips occur in the combustion turbines, gasification section, gas cooling section, the amine acid gas removal system, the slurry preparation section, the refinery sulfur recovery unit or in the air separation plant on a rolling 12 month basis.</li> <li>E. All periods when calculated PM<sub>10</sub> emission rates exceed 6.57 TPY on a rolling 12 month basis.</li> </ul>

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
		vi. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 <b>DE Admin Code</b> 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
2. Particulate Emissions:	I	
<ul> <li>i. Emission Standards: [Reference APC-97/0504] <ul> <li>A. The Owner/Operator shall not cause or allow the emission of particulate matter (PM10) in excess of 6.57 TPY from cooling tower operations on a rolling 12 month basis.</li> <li>B. The Owner/Operator shall not cause or allow the emissions of particulate matter in excess of 0.2 grains per standard cubic foot from the cooling tower operations. [Reference 7 DE Admin Code 1105 Section 2.0, dated 02/01/1981]</li> </ul> </li> <li>ii. Operational Limitation:  <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1 (EU-82).</li> </ul> </li> </ul>	iii. Compliance Method: [Reference APC-97/0504]  A. Compliance with Emission Standard (A) shall be based on Monitoring, Recordkeeping and Reporting Requirements.  B. Compliance with Emission Standard (B) shall be demonstrated by installing high efficiency mist eliminators having a vendor guaranteed emission factor of 0.002 percent drift loss per pound of cooling water circulation.  iv. Monitoring/Testing: [Reference APC-97/0504]  A. The Owner/Operator shall conduct a quarterly test of total solids using Method 2540B of Standard Methods for the Examination of Water and Wastewater.  B. The Owner/Operator shall continuously monitor cooling water flow rate.  v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Quarterly test results of total solids using Method 2540B of Standard Methods for the	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1.v (EU-82). [Reference APC-97/0504]  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Examination of Water and Wastewater. [Reference APC-97/0504]  B. Continuous cooling water flow rates. [Reference APC-97/0504]	
<ul> <li>3. Sulfur Dioxide (SO<sub>2</sub>):         <ul> <li>i. Emission Standard:</li></ul></li></ul>	<ul> <li>iii. Compliance Method: [Reference APC-97/0504] Compliance shall be demonstrated as follows: A. Emissions from raw syngas flaring shall be determined based on the coke and flux slurry rate to the gasifier and the percent sulfur in the slurry solids from the daily sample required by Monitoring Testing requirement (A).</li> <li>B. Emissions from clean syngas flaring shall be determined from the flow and sulfur content of the clean syngas as measured by the TRS analyzer.</li> <li>iv.Monitoring/Testing: [Reference APC-97/0504] A. The Owner/Operator shall monitor the sulfur content in the coke slurry on a daily basis when raw syngas is diverted to this flare.</li> <li>B. The Owner/Operator shall use the Department approved monitoring protocol to determine the sulfur content in the coke slurry fed to each gasifier. The monitoring protocol shall be used to determine the rate of sulfur entering the gasifier using daily sampling and analysis for sulfur content of the coke slurry.</li> </ul>	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ul> <li>v. Recordkeeping:     In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Hourly raw and clean syngas production rates from each gasifier. [Reference APC-97/0504]  B. Hourly coke and flux slurry rates to each gasifier. [Reference APC-97/0504]  C. Sulfur content in the coke slurry sampled and analyzed daily when raw syngas is diverted to the flare. [Reference APC-97/0504]  D. 24-hour rolling average and 12 month rolling average sulfur content in the clean syngas. [Reference APC-97/0504]  E. Cumulative rolling 12 month flare SO<sub>2</sub> emissions. [Reference APC-97/0504]  F. Record of all durations of raw syngas flaring events. [Reference APC-97/0504]</li> </ul>	
4. NO <sub>X</sub> Emissions:  i. Emission Standard: **Reference: Air Quality** Construction Permit Application, dated May 1997 and Letter with spreadsheet attachment from Mike Gritz to Ravi Rangan dated July 28, 2003]  The Owner/Operator shall not cause or allow the emission of NO <sub>X</sub> in excess of 28 tons from the flare during process upsets, planned startups and planned shut downs of gasification section, gas cooling section, amine acid gas removal system, combustion turbines, sulfur recovery unit or air separation plant in any rolling 12 month period.	iii. Compliance Method:     Compliance with the Emission Standard shall be based on Monitoring and Recordkeeping requirements. [Reference: 7 DE Admin. Code 1130 Section 6.3.1, dated 12/11/00]  iv. Monitoring/Testing: [Reference 7 DE Admin. Code 1130 Section 6.1.3.1.2 dated 12/11/2000]  The Owner/Operator shall continuously monitor the type and the duration of each type of fuel combusted in the flare.	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
ii. Operational Limitations: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1 (EU-82).	<ul> <li>v. Recordkeeping:     In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]</li> <li>A. Amount of raw and clean syngas flared.</li> <li>B. Continuous record of the hours that each fuel is combusted.</li> <li>C. Twelve (12) month running totals calculated each month for the previous calendar month of the amount and duration of each fuel type. [Reference APC-97/0504]</li> </ul>	
5. CO Emissions:		
i. Emission Standard: [Reference: Air Quality Construction Permit Application, dated May 1997 and Letter with spreadsheet attachment from Mike Gritz to Ravi Rangan dated July 28, 2003]  The Owner/Operator shall not cause or allow the emission of CO in excess of 1,117 tons from the flare during process upsets, planned start-ups and planned shut downs of gasification section, gas cooling section, amine acid gas removal system, combustion turbines, sulfur recovery unit or air separation plant in any rolling twelve (12) month period.	iii. Compliance Method: Compliance with the Emission Standard shall be based on Monitoring and Recordkeeping requirements. [Reference: 7 DE Admin. Code 1130 Section 6.3.1, dated 12/11/00]  iv. Monitoring/Testing: [Reference 7 DE Admin. Code 1130 Section 6.1.3.1.2 dated 12/11/2000] The Owner/Operator shall continuously monitor the type and the duration of each type of fuel combusted in the flare.	vi. Reporting: That required by Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit. [Reference: 7 <b>DE Admin Code</b> 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 <b>DE Admin Code</b> 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
ii. Operational Limitations:  Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1 (EU-82).	v. Recordkeeping: [Reference 7 DE Admin. Code 1130 Section 6.1.3.2 dated 12/11/2000]  In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Amount of raw and clean syngas flared.	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	<ul> <li>B. Continuous record of the hours that each fuel is combusted.</li> <li>C. Twelve (12) month running totals calculated each month for the previous calendar month of the amount and duration of each fuel type.</li> </ul>	
6. Visible Emissions:		
<ul> <li>i. Emission Standard: [Reference APC-97/0504]         Emissions from the flares shall be smokeless         except for periods not to exceed a total of 5         minutes during any 2 consecutive hours.</li> <li>ii. Operational Limitations:         Comply with "Conditions Applicable to Multiple         Pollutants" in Condition 3 - Table 1.c.1 (EU-82).</li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-97/0504]         Compliance with the visible Emission Standard shall be determined by the Monitoring/Testing requirement.</li> <li>iv. Monitoring/Testing: [Reference APC-97/0504]         Compliance with the visible Emission Standard shall be determined by Reference Method 22 of Appendix "A" in 40 CFR 60.</li> <li>v. Recordkeeping:         In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00         A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1.iv (EU-82).</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.c.1.v (EU-82). [Reference APC-97/0504]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
d. Emission Unit 84: Combined Cycle Units 84-1 a	nd 84-2 (Emission Points 84-1 and 84-2)	
Conditions Applicable to Multiple Pollutants:	I	
i. Emission Standards: [Reference 97/0503 (A3)]     A. The Owner/Operator shall not cause or allow emissions from the CCUs that exceed	iii. Compliance Method: [Reference APC-97/0503 (A3)]  A. Compliance with the Emission Standards  (A) and (B) (NSPS limits) shall be based on	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
the Standards of Performance for New Stationary Gas Turbines specified in 40 CFR 60 Subpart GG. [Reference 40 CFR 60 Subpart GG dated 09/10/1979 for SO2 and dated 10/17/2000 for NOx, and 7 DE Admin. Code 1120 Section 10 dated 11/27/1985]  B. The Owner/Operator shall not cause or allow emissions from the duct burners that exceed the Standards of Performance for Electric Utility Steam Generating Units specified in 40 CFR 60 Subpart Db. [Reference 40 CFR 60 Subpart Db dated 10/17/2000 for SO2 and particulate matter and dated 08/14/2001 for NOx, and 7 DE Admin. Code 1120 Section 26 dated 12/07/1988]  C. The Department reserves the right to establish emission limitations and/or additional controls for specific compounds based on the results of the stack tests required under the Monitoring/Testing requirements.  D. Comply with "Combined Limits" in Condition 3 - Table 1.f.  ii. Operational Limitations: [Reference APC-97/0503 (A3)]  A. When syngas is not fired in the combustion chambers of the CCUs, only low-sulfur diesel fuel (LSDF) may be fired in its place. The combined utilization of LSDF for both CCUs may not exceed 11,117,452 gallons in any 12 consecutive months.  B. The sulfur content in the LSDF oil shall not exceed 0.05 weight percent.  C. Only natural gas may be fired in the duct	the type of fuel combusted and/or compliance with the more stringent emission limits specified for individual pollutants for these units.  B. Compliance with the Operational Limitations (A) and (C) (pertaining to type and amount of fuel burned) shall be based on record keeping requirements.  C. Compliance with Operational Limitation (B) (pertaining to sulfur content of LSDF) shall be based on monitoring/testing requirements.  D. [RESERVED]  E. Compliance with the Operational Limitation (F) shall be based on record keeping requirements.  F. Comply with "Combined Limits" in Condition 3 - Table 1.f.  iv.Monitoring/Testing: [Reference 97/0503 (A3)]  A. LSDF sulfur content shall be determined by ASTM D-2622 or other federal or Department approved method.  B. [RESERVED]  C. Comply with "Combined Limits" in Condition 3 - Table 1.f.  v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. [RESERVED]	this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. [RESERVED]  B. The Owner/Operator shall notify the Department in writing prior to making any material changes which cause these units to fall under the Authority of Title IV of the Clean Air Act. [Reference APC-97/0503 (A3)]  C. Comply with "Combined Limits" in Condition 3 - Table 1.f.  vii. Certification Requirement:  That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
burners of the HRSGs. The combined utilization of natural gas shall not exceed 930,080 mmBtu/year in any twelve consecutive months.  D. [RESERVED] E. [RESERVED] F. The periods of startups, shutdowns and fuel transfers (syngas to LSDF and LSDF to syngas) shall not exceed 2 hours in duration.  G. Comply with "Combined Limits" in Condition 3 - Table 1.f.	B. The following records shall be maintained in accordance with Condition 3(b):  1. Record of all operating hours of each CCU showing clearly the hours of operation with different fuel types, i.e., hours of operation with syngas and LSDF, and the amount of each fuel type consumed. [Reference APC-97/0503 (A3)]  2. Record of all operating hours of the duct burner of each HRSG showing clearly the hours of operation and the amount of natural gas consumed. [Reference APC-97/0503 (A3)]  3. [RESERVED]  4. [RESERVED]  5. [RESERVED]  6. The weight percent sulfur content in LSDF. [Reference APC-97/0503 (A3)]  7. [RESERVED]  C. Comply with "Combined Limits" in Condition 3 - Table 1.f.	
<ul> <li>2. Particulate Emissions: <ol> <li>i. Emission Standards: [Reference APC-97/0503 (A3)]</li> <li>A. [RESERVED]</li> <li>B. PM<sub>10</sub> emissions including H<sub>2</sub>SO<sub>4</sub> shall not exceed the following limits: <ol> <li>0.0426 lb/mmBtu heat input when firing syngas in CCUs.</li> <li>0.0431 lb/mmBtu when firing syngas in the CCUs and natural gas in the duct burners.</li> <li>0.0090 lb/mmBtu when firing LSDF in the CCUs.</li> </ol> </li> </ol></li></ul>	<ul> <li>iii. Compliance Method: [Reference APC-97/0503 (A3)]</li> <li>A. Compliance with PM<sub>10</sub> Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the CCUs and duct burners.</li> <li>B. Compliance with TSP Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the CCUs and duct burners.</li> <li>C. The Owner/Operator may use stack test results obtained while the CCUs are</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.vi (EU-84).  vii. Certification Requirement: That required by Condition 3(c)(3) of this

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•		permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
	B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.iv (EU-84).	
	v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130]	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Section 6.1.3.1.2 and 6.2.1 dated 12/11/00  A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.v (EU-84).	
3. [RESERVED]		
4. Nitrogen Oxides (NOx):	I	
<ul> <li>i. Monitoring: <ul> <li>A. [RESERVED]</li> <li>B. The Owner/Operator shall not cause or allow the emission of NO<sub>X</sub> in excess of 360 TPY from each CCU.</li> <li>C. The NO<sub>X</sub> emissions from each CCU shall not exceed the following levels on an hourly basis: <ul> <li>1. 15 ppmvd @ 15% O<sub>2</sub> when CCU burns syngas without duct firing.</li> <li>2. 18 ppmvd @ 15% O<sub>2</sub> when CCU burns syngas with duct firing.</li> <li>3. 42 ppmvd @ 15% O<sub>2</sub> when CCU burns LSDF without duct firing.</li> <li>4. 39 ppmvd @ 15% O<sub>2</sub> when CCU burns LSDF with duct firing.</li> </ul> </li> <li>D. The NO<sub>X</sub> emission rates from the CCUs shall not exceed 390 ppmvd @ 15% O<sub>2</sub> during startups, shutdowns and fuel transfers (syngas to LSDF and LSDF to syngas).</li> <li>E. [RESERVED]</li> <li>ii. Operational Limitations: [Reference APC-97/0503 (A3)]</li> <li>A. NO<sub>X</sub> control shall be achieved by injecting nitrogen gas into the combustion chambers</li> </ul> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-97/0503 (A3)]  A. Compliance with the NO<sub>X</sub> Emission Standards shall be based on Continuous Emissions Monitoring System (CEMS) for NO<sub>X</sub> and O<sub>2</sub>.  B. Compliance with the Operational Limitations shall be based on Recordkeeping requirements.</li> <li>iv. Monitoring/Testing: [Reference APC-97/0503 (A3)]  A. The Owner/Operator shall operate and maintain NO<sub>X</sub> and O<sub>2</sub> CEMS for the CCUs. B. The Quality Assurance/Quality Control (QA/QC) procedures for NO<sub>X</sub> CEMS shall be established in accordance with 40 CFR Part 60, Appendix "F". C. [RESERVED]</li> <li>v. Recordkeeping: In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. The Owner/Operator shall keep NO<sub>X</sub> CEMS data calibration and audit results in accordance with Condition 3(b). [Reference</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. [RESERVED]  vii. Certification Requirement: In addition to the requirements of Condition 3(c)(3) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 — Table 1.a.2.v (EU-80).

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
of the CCUs when burning syngas and by steam injection when burning LSDF.  B. Except during start ups, shut downs and fuel transfers (syngas to LSDF and LSDF to syngas), the CCUs shall not be operated unless the NO <sub>x</sub> control measure described in Operational Limit (A) above is operating properly.	APC-97/0503 (A3)] B. [RESERVED]	
<ul><li>5. Carbon Monoxide (CO):</li><li>i. Emission Standards: [Reference APC-97/0503 (A3)]</li></ul>	iii. Compliance Method: [Reference APC-97/0503 (A3)]	vi. Reporting:
A. [RESERVED]  B. CO emissions on an hourly basis shall not exceed the following limits:  1. 0.051 lb/mmBtu heat input when firing syngas in CCUs without duct burners.  2. 0.069 lb/mmBtu when firing syngas in the CCUs and natural gas in the duct burners.  3. 0.048 lb/mmBtu when firing LSDF in the CCUs without duct burners.  4. 0.067 lb/mmBtu when firing LSDF in the CCUs and natural gas in the duct burners.  C. The above lb/mmBtu limits shall not apply during periods of startup, shutdown and fuel transfer (syngas to LSDF and LSDF to syngas). The Owner/Operator shall follow good air pollution control practices to minimize CO emissions during these periods.  ii. Operational Limitations: [Reference APC-97/0503 (A3)]	Compliance with the CO Emission Standards shall be based on the following methods:  A. CEMs for the CCUs.  B. [RESERVED] C. [RESERVED]  iv.Monitoring/Testing: [Reference APC-97/0503 (A3)]  A. The Owner/Operator shall operate and maintain CO CEMS for the CCUs.  B. [RESERVED] C. The CO CEMS shall satisfy the applicable Performance Specifications in 40 CFR part 60, Appendix "B." The QA/QC procedures for the CO CEMS shall be established in accordance with the procedures in 40 CFR Part 60 Appendix "F."  v. Recordkeeping: The Owner/Operator shall maintain CO CEMS data, calibration and audit results in accordance with Condition 3(b).	In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.vi (EU-84).  Vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1 (EU-84).  6. Volatile Organic Compounds (VOC):		
<ul> <li>i. Emission Standards: [Reference APC-97/0503 (A3)]  A. [RESERVED]  B. VOC emissions shall not exceed the following limits:  1. 0.0011 lb/mmBtu heat input when firing syngas in CCUs without duct burners.  2. 0.0048 lb/mmBtu when firing syngas in the CCUs and natural gas in the duct burners.  3. 0.0082 lb/mmBtu when firing LSDF in the CCUs without duct burners.  4. 0.0108 lb/mmBtu when firing LSDF in the CCUs and natural in the duct burners.</li> <li>ii. Operational Limitations:  Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1 (EU-84).</li> </ul>	iii. Compliance Method: [Reference APC-97/0503 (A3)]  A. Compliance with the VOC Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the CCUs and duct burners.  B. The Owner/Operator may use stack test results obtained while the CCUs are operating with duct burners to demonstrate compliance with the respective non-duct burner emission standards for VOC by subtracting the heat input of the duct burners.  iv. Monitoring/Testing:  A. The Owner/Operator shall conduct annually an EPA Reference Method 25 A stack test for VOC, in accordance with Condition 3(b). The Owner/Operator may petition the Department to decrease the frequency of VOC performance tests based on the results of any performance testing.  B. If the Owner/Operator conducts stack testing with the duct burners in operation, the Owner/Operator shall calculate the emission rate for operation without duct burner operation by subtracting the heat input contributed by the duct burners.  C. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 -	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.vi (EU-84).  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	Table 1.d.1.iv (EU-84).	
	v. Recordkeeping: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.v (EU- 84).	
7. [RESERVED]		
8. [RESERVED]		
9. Visible Emissions:		
<ul> <li>i. Emission Standard: [Reference APC-97/0503 (A3)]         The Owner/Operator shall not cause or allow the emission of visible air contaminants from the CCUs in excess of 20% opacity for an aggregate of more than 3 minutes in any 1 hour period, or more than 15 minutes in any 24 hour period.     </li> <li>ii. Operational Limitations:         Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1 (EU-84).     </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-97/0503 (A3)]         Compliance with the visible Emission Standard shall be based on Monitoring/Testing requirements and on information available to the Department which may include, but is not limited to, monitoring results, opacity and process operating data.     </li> <li>iv. Monitoring/Testing: [Reference APC-97/0503 (A3)]         The opacity of visible emissions shall be verified quarterly by EPA Reference Method No. 9 in accordance with 7 DE Admin Code 1120 Section 1.5 for any calendar quarter during which No. 2 fuel oil is fired in the combustion chambers of the CCUs, unless the Owner/Operator can demonstrate that verification for that calendar quarter was not practicable due to the length of time fuel oil was fired in the combustion chambers or other issues demonstrating impracticability. The Owner/Operator shall, however, perform at least one Method No. 9 verification during each calendar year. If opacity readings over 20%     </li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.vi (EU-84).  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	are recorded at any time, the Department reserves the right to require the Owner/Operator to conduct more frequent visible emissions observations and may include the requirement to install a COMS.  v. Recordkeeping:     In addition to complying with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.d.1.v (EU-84), the Owner/Operator shall keep the opacity readings recorded in accordance with the Monitoring/Testing requirements when LSDF is fired in the combustion chambers of the CCUs.	
<ul><li>e. Facility-Wide: The following permit conditions a listed in Regulation No. 30 Appendix A operated b</li><li>1. Conditions applicable to Multiple Pollutants:</li></ul>	are applicable to all emission units listed in Condition N by the Owner/Operator.	lo. 1 of this permit and any insignificant activity
i. Operational Limitations:  A. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall maintain and operate the equipment and processes covered by this Permit, including all structural and mechanical components and all associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.  B. [RESERVED]	ii. Compliance Method:    Compliance shall be based on information available to the Department which may include, but is not limited to, monitoring/testing results, opacity and process operating data. [Reference: 7 DE Admin. Code 1130 Section 6.3.1, dated 12/11/00]  iii. Monitoring & Testing:    None in addition to those listed in Condition 3(b)(1)(ii) of this permit.  iv. Recordkeeping:    None in addition to those listed in Condition 3(b)(2) of this permit.	<ul> <li>v. Reporting Requirement: None in addition to those listed in Condition 3(c)(2)(ii)(B) of this permit.</li> <li>vi. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]</li> </ul>

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
<ul> <li>2. Odor:         <ol> <li>Emission Standard: [Reference APC-97/0504]</li> <li>Odors from this source shall not be detectable beyond the plant property lines in quantities which cause a condition of air pollution as "air pollution" is defined in 7 DE Admin. Code 1101. [State Enforceable Only]</li> </ol> </li> <li>ii. Operational Limitations:         <ol> <li>None in addition to those listed in Condition 3(a) of this permit.</li> </ol> </li> </ul>	<ul> <li>iii. Compliance Method:         <ul> <li>Compliance with the emission standard of this condition shall be demonstrated in accordance with the monitoring/testing and record keeping requirements of this condition and based on information available to the Department which may include, but is not limited to, monitoring results and process operating data. [Reference: 7 DE Admin. Code 1130 Section 6.3.1, dated 12/11/00]</li> </ul> </li> <li>iv. Monitoring &amp; Testing: [Reference 7 DE Admin. Code 1119 Section 1.2 dated 2/1/81]         <ul> <li>Includes but is not limited to scentometer tests, air quality monitoring, and affidavits from affected citizens and investigators.</li> </ul> </li> <li>v. Recordkeeping: [Reference 7 DE Admin. Code 1130 Section 6.1.3.1.2 dated 12/11/2000]         <ul> <li>Records of all monitoring/testing shall be maintained on site in accordance with Condition 3(b).</li> </ul> </li> </ul>	vi. Reporting Requirement: All records indicating exceedance of the standard in accordance with Condition 3(c)(2) of this permit.  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
3. Visible Emissions: i. Emission Standard: [Reference 7 DE Admin. Code 1114 Section 2.1 dated 07/17/1984] The Owner/Operator shall not cause or allow the emission of visible air contaminants and/or smoke from a stationary or mobile source, the shade or appearance of which is greater than 20% percent opacity for an aggregate of more than 3 minutes in any 1 hour or more than 15 minutes in any 24 hour period.	iii. Compliance Method: [Reference 7 DE Admin. Code 1114 Section 2.1 dated 07/17/1984 and 7 DE Admin. Code 1130 Section 6.1.3 dated 12/11/2000]  Except for units where compliance with the visible emission standard is required to be demonstrated by a COMS or where compliance is otherwise specified within this permit, compliance with the visible Emission Standard of this condition shall be demonstrated in accordance with Subsection 1.5(c) of 7 DE	vi. Reporting: All records indicating exceedances of the standard in accordance with Condition 3(c)(2) of this permit.  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
ii. Operational Limitations:    Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.e.1 (Facilitywide).	Admin Code 1120 and the record keeping requirements of this condition.  iv.Monitoring/Testing:  A. [RESERVED]  B. For sources not subject to a specific visible emissions requirement within this permit, the Owner/Operator shall conduct weekly qualitative observations to determine the presence of any visible emissions.  1. If visible emissions are observed, the Owner/Operator shall take corrective actions and/or determine compliance in accordance with subparagraph 3 below.  2. If no visible emissions are observed or are within permitted limits, no further action is required.  3. If required under subparagraph 1 above, the Owner/Operator shall, in accordance with 7 DE Admin Code 1120 Section 1.5, conduct visual observations at fifteen second intervals for a period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. The additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Section 2 and 3 (except for Section 2.5 and the second sentence of Section 2.4) of reference Method 9 set forth in Appendix A, 40 CFR Part 60	

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	revised July 1, 1982. [Reference 7 <b>DE Admin Code</b> 1130 Section 6.1.3 dated 12/11/2000]	
	v. Recordkeeping: [Reference 7 <b>DE Admin. Code</b> 1130 Section 6.1.3.1.2 dated 12/11/2000]  Observation records shall be maintained on site in accordance with Condition 3(b).	

- **f. Combined Limits:** The following permit conditions are applicable to multiple emission units as noted below:
- 1. Conditions Applicable to Multiple Pollutants:
- i. Operational Limitations:
  - A. During single train operation of the gasifier, the sulfur content in the clean syngas shall not exceed 508 ppmvd on a 24-hour rolling average basis and 480 ppmvd on a twelve month rolling average basis as measured by the TRS analyzer. Within 60 days of achieving sustained two train operation at the design rate, the Owner/Operator shall propose for the Department's approval a short term and annual TRS limits for two gasifier train operations. In the interim period, during two train operations, the sulfur content in the clean syngas shall not exceed 830 ppmvd on a 24 hour rolling average basis. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-*97/0503 (A3)]*
  - B. [RESERVED]
  - C. The Owner/Operator shall not cause or allow the use of any fuel having a sulfur content greater than 1.0 % by weight and

- ii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)1
  - A. Compliance with Operational Limitation (A) shall be based on the TRS CEMS.
  - B. Compliance with Operational Limitation (C) shall be based on recordkeeping.
- iii. Monitoring/Testing: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]
  - A. The Owner/Operator shall continuously monitor and record the concentration (dry basis) of TRS in syngas before it is combusted in any fuel burning device. The TRS monitor shall be located downstream of all process steps which impact the composition of syngas prior to its being combusted in any fuel burning device. The TRS monitor shall conform to the QA/QC requirements recommended by the manufacturer's specifications and listed in the QA/QC Plan for the TRS monitor. The

- v. Reporting:
  - In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 **DE Admin Code** 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
  - A. [RESERVED]
  - B. **[RESERVED]**
  - C. The Owner/Operator shall submit the following quarterly CEMS reports by January 30, April 30, July 30 and October 30 of each calendar year:
    - <u>1</u>. [RESERVED]
    - 2. The SO<sub>2</sub>, NO<sub>x</sub> and CO CEMS and COMS reports for CEMS required for the Boilers and CCUs shall include the following:
      - Excess emissions and the nature and cause of the excess emissions, if known. The summary shall consist of emission averages, in the

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	nal Limitations, and Operational (Monitoring, Testing, QA/QC Procedures, and			
any distillate fuel oil having a sulfur content greater than 0.3 % by weight in any fuel burning equipment. [Reference 7 DE Admin Code 1108 Sections 2.1 and 2.2, dated 05/09/1985]	TRS monitor shall conform to Performance Specification 5 of 40 CFR Part 60, Appendix "B." Relative accuracy evaluations shall be conducted using Method 15 of 40 CFR Part 60, Appendix "A." [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]  B. [RESERVED]  iv. Recordkeeping:    In addition to the requirements of Conditions 3(b)(1)(ii) and 3(b)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Section 6.1.3.1.2 and 6.2.1 dated 12/11/00]  A. Records shall be maintained of all 24-hour rolling and 12-month rolling averages of sulfur content in clean syngas as measured by the TRS analyzer. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]	units of the applicable standard, for each averaging period during which the applicable standard was exceeded.  b. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments.  c. When no excess emissions have occurred and the CEMS have not been inoperative, repaired, or adjusted, such information shall be included in the report.  [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]		
<ul> <li>2. Particulate Emissions:</li> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall not cause or allow the emission of particulate matter (PM10) in excess of 311 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined (inclusive of H2SO4 mist) on a rolling twelve (12) month basis.</li> <li>B. The Owner/Operator shall not cause or allow the emission of total suspended</li> </ul>	<ul> <li>iii. Compliance Method [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. Compliance with PM10 Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the CCUs, duct burners and boilers.</li> <li>B. Compliance with TSP Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the CCUs, duct burners and boilers.</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.  vii. Certification Requirement: Comply with "Conditions Applicable to Multiple		

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	rational Limitations, and Operational (Monitoring, Testing, QA/QC Procedures, and			
particulate (TSP) in excess of 78.7 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined.  C. The Owner/Operator shall not cause or allow the emission of particulate matter in excess of 0.3 lb/mmBtu, maximum two (2) hour average, from any fuel burning equipment. [Reference 7 DE Admin Code 1104 Section 2.1, dated 2/1/1981]  ii. Operational Limitation:  Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.	iv.Monitoring/Testing:  A. The Owner/Operator shall conduct the following stack tests annually, in accordance with Condition 3(b):  1. EPA Reference Method 5 for TSP. 2. EPA Reference Method 5B/202 for PM10, including H2SO4. 3. The Owner/Operator may petition the Department to decrease the frequency of TSP or PM10 performance tests based on the results of any performance testing.  B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii.  v. Recordkeeping: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv.	Pollutants" in Condition 3 - Table 1.a.2.v.		
<ul> <li>3. Sulfur Dioxide (SO<sub>2</sub>):</li> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall not cause or allow the emission of SO<sub>2</sub> in excess of 2079.7 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined.</li> </ul>	iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)] Compliance with the SO <sub>2</sub> Emission Standards shall be based on Continuous Emissions Monitoring System (CEMS) for Boiler 80-3 and the CCUs and the H <sub>2</sub> S Continuous Monitoring System (CMS) for Boilers 80-1 and 80-2.	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.		
ii. Operational Limitations: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.	iv.Monitoring/Testing: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)] A. The Owner/Operator shall operate and	vii. Certification Requirement: That required by Condition 3(c)(3) of this		

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	maintain SO <sub>2</sub> CEMS for Boiler 80-3 and the CCUs and H <sub>2</sub> S CMS for Boilers 80-1 and 80-2.  B. The SO <sub>2</sub> CEMS for Boiler 80-3 and the CCUs shall conform to Performance Specification 2 of 40 CFR 60, Appendix "B," and the Quality Assurance/Quality Control (QA/QC) procedures shall be established in accordance with 40 CFR 60, Appendix "F."  V. Recordkeeping: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]  A. The Owner/Operator shall maintain SO <sub>2</sub> CEMS data, calibration and audit results in accordance with Condition 3(b).	permit. [Reference: 7 <b>DE Admin Code</b> 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
4. Nitrogen Oxides (NOx):		
<ul> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall not cause or allow the emission of NOx in excess of 1,261 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined on a rolling twelve (12) month basis.</li> </ul>	iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]  A. Compliance with the NO <sub>X</sub> Emission Standards shall be based on Continuous Emissions Monitoring System (CEMS) for NO <sub>X</sub> and CO <sub>2</sub> for Boilers 80-1, 80-2 and 80- 3 and the CCUs.	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.
ii. Operational Limitations: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.	<ul> <li>iv. Monitoring/Testing: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall operate and maintain NO<sub>X</sub> and CO<sub>2</sub> or O<sub>2</sub> CEMS for the boilers and the CCUs, respectively.</li> <li>B. The QA/QC procedures for NO<sub>X</sub> and CO<sub>2</sub>/O<sub>2</sub> CEMS shall be established in accordance</li> </ul>	vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
	with 40 CFR 60, Appendix "F".  v. Recordkeeping:  A. The Owner/Operator shall maintain NO <sub>X</sub> CEMS data calibration and audit results in accordance with Condition 3(b). [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]	
<ul> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall not cause or allow the emission of CO in excess of 470.2 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined on a rolling twelve (12) month basis.</li> <li>ii. Operational Limitations: <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.</li> </ul> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>Compliance with the CO Emission Standards shall be demonstrated by the following methods: <ul> <li>A. Stack test based emissions factor and fuel flow rates for Boilers 80-1 and 80-3.</li> <li>B. CEMS for Boiler 80-2 and the CCUs.</li> </ul> </li> <li>iv. Monitoring/Testing: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)] <ul> <li>A. The Owner/Operator shall operate and maintain CO CEMS for Boiler 80-2 and the CCUs.</li> </ul> </li> <li>B. The QA/QC procedures for the CO CEMS shall be established in accordance with the procedures in 40 CFR Part 60, Appendix "F."</li> <li>C. For Boilers 80-1 and 80-3, the Owner/Operator shall conduct annually an EPA Reference Method 10 stack test for CO. The Owner/Operator may petition the</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.  vii. Certification Requirement: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification					
	Department to decrease the frequency of CO performance tests based on the results of any performance testing.  v. Recordkeeping:  A. For Boiler 80-2 and the CCUs, the Owner/Operator shall maintain CO CEMS data, calibration and audit results in accordance with Condition 3(b).  B. For Boilers 80-1 and 80-3 the Owner/Operator shall comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv.						
6. Volatile Organic Compounds (VOC):							
i. Emission Standard:  A. The Owner/Operator shall not cause or allow the emission of VOC in excess of 22.7 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined on a rolling twelve (12) month basis. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]  ii. Operational Limitations:  Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.	iii.Compliance Method: Compliance with the VOC Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers and CCUs. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]  iv.Monitoring/Testing: A. The Owner/Operator shall conduct annually an EPA Reference Method 25A stack test for VOC, in accordance with Condition 3(b). The Owner/Operator may petition the Department to decrease the frequency of VOC performance tests based on the results of any performance testing.  B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii.	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]					

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards				
7. Sulfuric Acid Mist (H <sub>2</sub> SO <sub>4</sub> ):	v. Recordkeeping: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv.			
<ul> <li>i. Emission Standards: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. The Owner/Operator shall not cause or allow the emission of H<sub>2</sub>SO<sub>4</sub> in excess of 235.4 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined on a rolling twelve (12) month basis.</li> <li>ii. Operational Limitations:         <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.</li> </ul> </li> </ul>	<ul> <li>iii. Compliance Method: [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>A. Compliance with the H<sub>2</sub>SO<sub>4</sub> Emission Standards shall be demonstrated using stack test based emissions factors and fuel flow rates for the boilers and CCUs.</li> <li>B. Compliance for the boiler 80-3 and the CCUs shall be demonstrated by applying the stack test based SO<sub>2</sub> to H<sub>2</sub>SO<sub>4</sub> conversion factor to the CEMS-monitored SO<sub>2</sub> emissions.</li> <li>C. Compliance for the Boilers 80-1 and 80-2 shall be demonstrated by applying the fuel gas monitored H<sub>2</sub>S content to the H<sub>2</sub>SO<sub>4</sub> conversion factor.</li> <li>iv. Monitoring/Testing: <ul> <li>A. The Owner/Operator shall conduct annually an EPA Reference Method 8 stack test for H<sub>2</sub>SO<sub>4</sub>, in accordance with Condition 3(b). The Owner/Operator may petition the Department to decrease the frequency of H<sub>2</sub>SO<sub>4</sub> performance tests based on the results of any performance testing.</li> <li>B. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii.</li> </ul> </li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]		

Permit: <u>AQM-003/00016 - Part 3 (Renewal 1)(Revision 2)</u> The Premcor Refining Group Inc.

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<u>condition 3 Table 1: Specific Regulierients (continued)</u>							
Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification					
	v. Recordkeeping: Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1a.1.iv.						
<ul> <li>8. Lead (Pb): <ul> <li>i. Emission Standard:</li> <li>A. The Owner/Operator shall not cause or allow the emission of Pb in excess of 0.02 TPY from the CCUs (Emission Units 84-1 and 84-2) and Boilers 80-1, 80-2 and 80-3, combined on a rolling twelve (12) month basis. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>ii. Operational Limitations: <ul> <li>Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.</li> </ul> </li> </ul></li></ul>	<ul> <li>iii. Compliance Method:     Compliance with the Pb Emission Standard shall be demonstrated by firing desulfurized fuel gas or clean syngas in the boilers and either clean syngas or LSDF in the CCUs and natural gas in the duct burners. [Reference APC-90/0288 (A5), APC-90/0289 (A6), APC-90/0290 (A5) and APC-97/0503 (A3)]</li> <li>iv. Monitoring/Testing:     Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iii.</li> <li>v. Recordkeeping:     Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.iv.</li> </ul>	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00] A. Comply with "Conditions Applicable to Multiple Pollutants" in Condition 3 - Table 1.a.2.v.  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]					
<ul> <li>9. Carbon Dioxide (CO<sub>2</sub>): <ol> <li>Operational Limitation:</li> <li>The annual electrical output to the grid resulting from the operation of [unit] shall not exceed 10 % of the annual gross electrical generation resulting from the operation of [unit]. The effect of this operational limitation will enable the Company to qualify for the limited exemption provided in Section 1.1.2 of Regulation 1147. To the extent that the limited exemption is not applicable to Company operations for whatever reason, including the Company's voluntary decision not to qualify for</li> </ol> </li> </ul>	iii. Compliance Methodology: [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]  Compliance with the operational limitation shall be based on monitoring data. Unless an alternative methodology is approved by the Department, the percent of electrical output to the grid for each affected unit shall be calculated as follows:  % PEXP[u] = (PEXPTOT / PGENTOT) x 100	vi. Reporting: In addition to the requirements of Conditions 2(a), 2(b)(9), 2(f)(3), 3(b)(1)(ii), and 3(c)(2) of this permit, the Company shall: [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]  A. The Company shall report to the Department the amount of annual gross generation of each affected unit exempt under Section 1.2.2.1 of Regulation 1147 and the amount of annual gross generation supplied by the facility to the electric grid during the year by					

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
the limited exemption on a going-forward basis, then this operational limitation, and any associated compliance methodology, testing, monitoring, record keeping and reporting requirements shall not apply. However, the Company must inform the Department in writing within 30 days of determining that it does not desire to qualify for the limited exemption. [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]	where:  % PEXP[u] = Percent of annual electrical output to the grid resulting from the operation of unit "u".  PEXPTOT = Total annual power exported by the entire facility as measured by the "make/take" electrical meters  PGENTOT = Total power generated by the entire facility	the following February 1. [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]  vii. Certification: That required by Condition 3(c)(3) of this permit. [Reference: 7 DE Admin Code 1130 Sections 6.1.3.2.3 and 6.2.1 dated 12/11/00]
<ul> <li>ii. Administrative Requirements: [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]</li> <li>A. The Company and, to the extent applicable, the CO2 authorized account representative of a unit exempt under 1.2.2.1 of Regulation 1147 shall comply with all the requirements of Regulation 1147 concerning all time periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.</li> <li>B. On the earlier of the following dates, a unit exempt under 1.2.2.1 of Regulation 1147 shall lose its exemption:</li> <li>1. the date on which the restriction on the percentage of annual gross generation that may be supplied to the electric grid described in 1.2.2.1 of Regulation 1147 is removed from the unit's permit or otherwise becomes no longer applicable in any year that commences on or after</li> </ul>	<ul> <li>iv. Monitoring/Testing: [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]</li> <li>The Company shall monitor the following parameters: <ul> <li>A. Annual power generated by each Turbo generator unit.</li> <li>B. Annual power generated by direct firing of each CCU.</li> <li>C. Annual power output to the grid for the facility.</li> </ul> </li> <li>v. Recordkeeping: <ul> <li>The company shall maintain following records for 10 years from the date the records are created:</li> <li>A. Annual power generated by each Turbo generator unit.</li> <li>B. Annual power generated by direct firing of each CCU.</li> <li>C. Annual power output to the grid for the facility.</li> </ul> </li> </ul>	

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Emission Limitations, Emission Standards, Operational Limitations, and Operational Standards	Compliance Determination Methodology (Monitoring, Testing, QA/QC Procedures, and Record Keeping)	Reporting and Compliance Certification
January 1, 2009; or  2. the first date on which the unit fails to comply, or on which the owners and operators fail to meet their burden of proving that the unit is complying, with the restriction on the percentage of annual gross generation that may be supplied to the electric grid described in 1.2.2.1 of Regulation 1147 during any year that commences on or after January 1, 2009.  C. A unit that loses its exemption in accordance with 1.2.2.3.5 of Regulation 1147 shall be subject to the requirements of Regulation 1147. For the purpose of applying permitting requirements under 3.0 of Regulation 1147, allocating allowances under 5.0 of Regulation 1147, and applying monitoring requirements under 8.0 of Regulation 1147, the unit shall be treated as commencing operation on the date the unit loses its exemption.	The 10-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Department. The Company shall bear the burden of proof that each affected unit met the restriction on the percentage of annual gross generation that may be supplied to the electric grid. [Reference APC-90/0288 (A6), APC-90/0289 (A7), APC-90/0290 (A6), APC-90/0291 (A1) and APC-97/0503 (A5)]	

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#### **Condition 4- Operational Flexibility**

- a. In addition to the operational flexibility specifically provided in the terms and conditions detailed in Condition 3 – Table 1 of this permit, the Owner and/or Operator is authorized to make any changes within the facility which contravenes the terms and conditions of this permit without a permit revision if the change:
  - 1. Is not a modification or otherwise prohibited under any provision of Title I of the Act or the State Implementation Plan (SIP); and [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
  - Does not involve a change in any compliance schedule date; and [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
  - 3. Does not result in a level of emissions exceeding the emissions allowable under this permit, whether expressed herein as a rate of emissions or in terms of total emissions. [Reference: 7 DE Admin. Code 1130 Section 6.8 dated 12/11/00]
- b. Before making a change under the provisions of Condition 4(a) of this permit, the Owner and/or Operator shall provide advance written notice to the Department and to the EPA in accordance with Condition 3(c)(2)(iii) of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]
- c. The Owner and/or Operator shall keep records of any changes made under Condition 4 of this permit in accordance with Condition 3(b)(2)(iv) of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.8.1 dated 12/11/00]

#### **Condition 5- Compliance Schedule**

This permit does not contain a compliance schedule. [Reference: 7 DE Admin. Code 1130 Section 6.3.3 dated 12/11/00]

#### **Condition 6. Permit Shield.**

Compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements as provided in Condition 6 -Table 1 as of the effective date of this permit. [Reference: 7 DE Admin. Code 1130 Section 6.6.3 dated 12/11/2000]

#### **Condition 6 – Table 1**

	Emission Unit		Applicable Requirement
1.	Emission Unit 80	i.	7 <b>DE Admin. Code</b> 1104 Section 2.1
	Boiler Nos. 1, 2 and 3	ii.	7 <b>DE Admin. Code</b> 1108 Section 2.1
		iii.	7 <b>DE Admin. Code</b> 1112 Section 3.2
		iv.	7 <b>DE Admin. Code</b> 1114 Section 2.1
		٧.	7 <b>DE Admin. Code</b> 1139
2.	Emission Unit 80	i.	7 <b>DE Admin. Code</b> 1104 Section 2.1
	Boiler No. 4	ii.	7 <b>DE Admin. Code</b> 1108 Section 2.1
		ii.	7 <b>DE Admin. Code</b> 1112 Section 3.2
		iii.	7 <b>DE Admin. Code</b> 1114 Section 2.1
		iv.	7 DE Admin. Code 1136 and 40 CFR Part 72
		٧.	7 <b>DE Admin. Code</b> 1139
3.	Emission Unit 82	i.	7 <b>DE Admin. Code</b> 1114 Section 2.1
		ii.	7 <b>DE Admin. Code</b> 1124 Section 29 and 40 CFR Part
			60 subpart VV

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		iii.	40 CFR Part 60 Subpart A
4.	Emission Unit 50	i.	7 <b>DE Admin. Code</b> 1105 Section 2
5.	Emission Unit 84	i.	7 <b>DE Admin. Code</b> 1104 Section 2.1
		ii.	7 <b>DE Admin. Code</b> 1108 Section 2.1
		iii.	7 <b>DE Admin. Code</b> 1112 Section 3.5
		iv.	7 <b>DE Admin. Code</b> 1114 Section 2.1
		٧.	7 <b>DE Admin. Code</b> 1120 Section 26 and 40 CFR Part
			60 Subpart D6
		vi.	7 <b>DE Admin. Code</b> 1120 Section 11 and 40 CFR Part
			60 Subpart J
		vii.	7 <b>DE Admin. Code</b> 1120 Section 10 and 40 CFR Part
			60 Subpart GG
		viii.	7 <b>DE Admin. Code</b> 1125 Section 2
		ix.	7 <b>DE Admin. Code</b> 1139 Section 2
6.	Facility-wide	i.	7 <b>DE Admin. Code</b> 1114 Section 2.1
		ii.	7 <b>DE Admin. Code</b> 1117 Section 4
		iii.	7 <b>DE Admin. Code</b> 1119 Section 2.1

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pc: Dover Title V File

Ravi Rangan, P.E.

Bruce Steltzer

# Attachment "A"- Revision History

Date	Number	Revision Type	Description	Pages Revised
3/4/2010	Revision 2	Significant Permit Modification	Significant modifications	all
8/6/2008	Revision 1	Administrative Permit Amendment	Incorporates change of Responsible Official	1, 59
5/27/2008	Renewal 1	Permit Renewal	Renewal permit issued	all
11/10/2005	Revision 1	Administrative Permit Amendment	Incorporates change of Responsible Official	1
4/30/2002	Revision 2	Administrative Permit Amendment	Added two fuel sources for Train 29-H-2	17
3/20/2002	Revision 1	Significant Permit Modification	Incorporates Alternate Monitoring Plans for fuel combustion units per 40 CFR 60 Subpart J	17, 17a, 18, 70, 70a, 71, 102a, 103